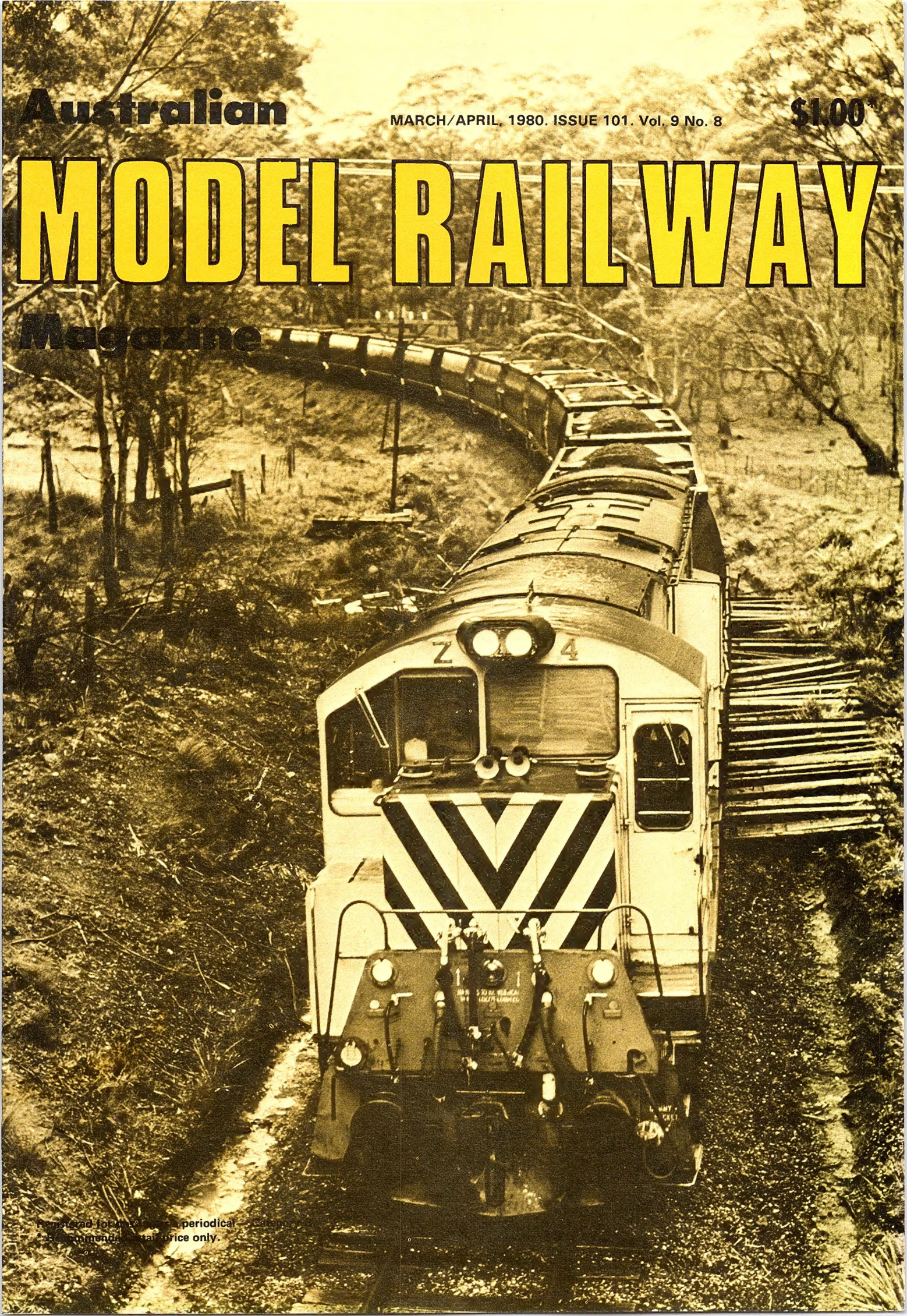
Australian

MARCH/APRIL, 1980. ISSUE 101. Vol. 9 No. 8

$1.00*

MODEL RAILWAY

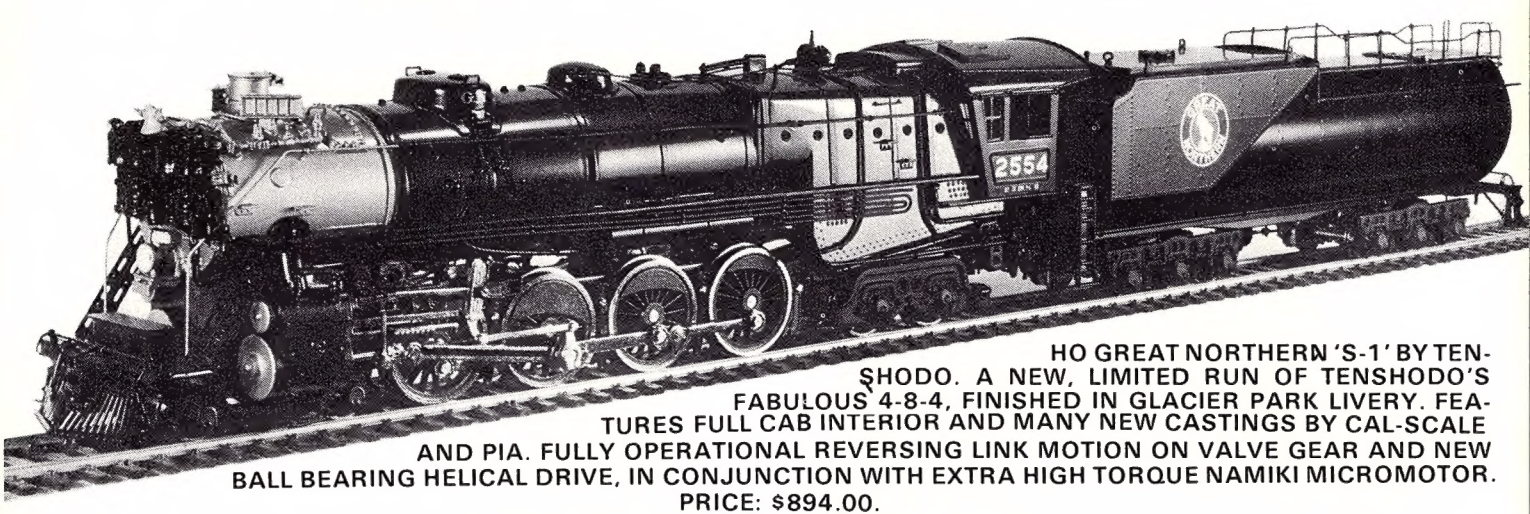
Magazine



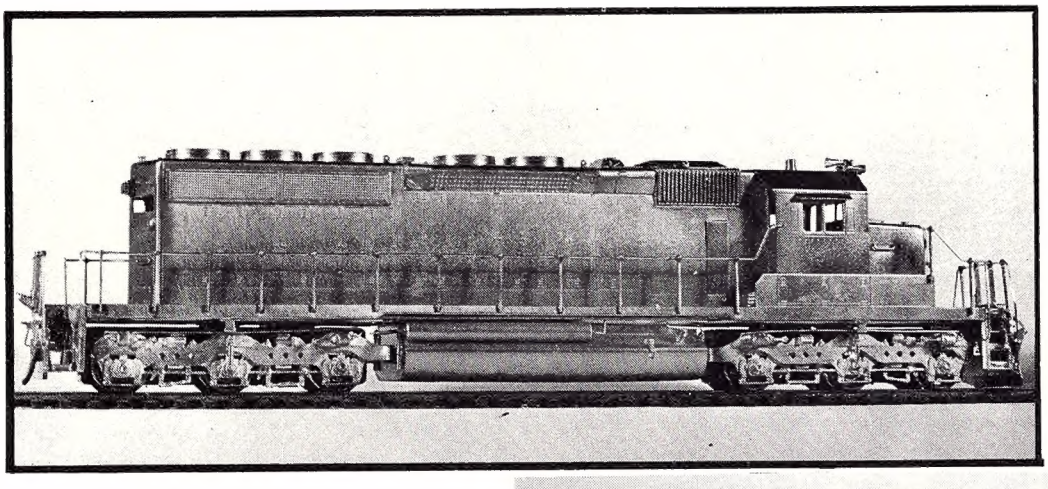
Registered for [illegible] periodical [illegible]

* Recommended retail price only.

NEW DELIVERIES IN MOTIVE POWER —NOW ON THE 'READY TRACK'.....



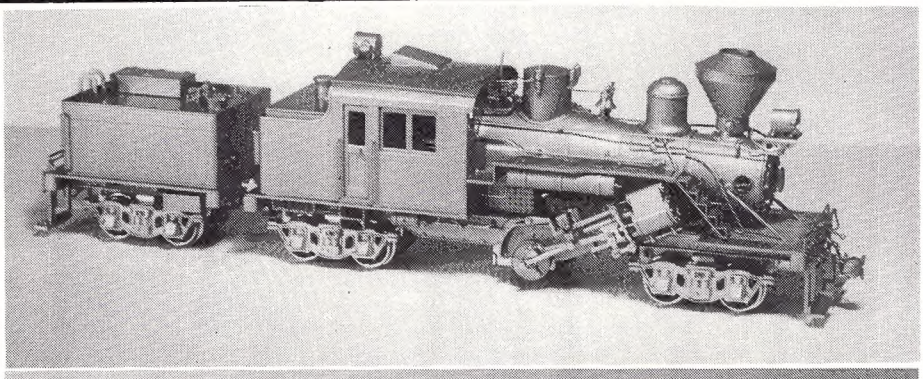
HO GREAT NORTHERN 'S-1' BY TENSHODO. A NEW, LIMITED RUN OF TENSHODO'S FABULOUS 4-8-4, FINISHED IN GLACIER PARK LIVERY. FEATURES FULL CAB INTERIOR AND MANY NEW CASTINGS BY CAL-SCALE AND PIA. FULLY OPERATIONAL REVERSING LINK MOTION ON VALVE GEAR AND NEW BALL BEARING HELICAL DRIVE, IN CONJUNCTION WITH EXTRA HIGH TORQUE NAMIKI MICROMOTOR. PRICE: $894.00.



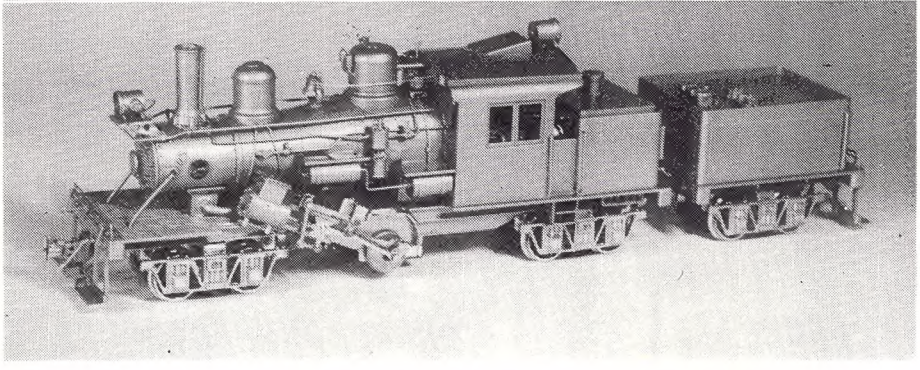
HO EMD SD-40-2 . . . BY ALCO MODELS. POWERED BY 'CAN' MOTOR, WITH DRIVE TO ALL AXLES BY ENCLOSED GEAR BOXED. LONG NOSE VERSION IN STOCK. PRICE: $258.00 HIGH HOOD & STANDARD VERSIONS TO FOLLOW IN 1980.

UNITED SCALE MODELS

AT LAST! . . . HO 3-TRUCK CLIMAX GEARED LOCOMOTIVES, IN TWO VERSIONS, FROM THE SHOPS OF 'UNITED' . . .



TOP VIEW SHOWS HILLCREST LUMBER CO. VERSION AND LOWER VERSION, THE SAN JOAQUIN RAILROAD MODEL.



NOTE WIDTH DIFFERENCES IN THE MATTER OF CYLINDER BLOCKS, TRUCK FRAMES, CAB STYLES, RUNNING BOARD, STACK, STEAM DOME AND TENDER DETAILS. PRICE: EITHER MODEL, $533.50.

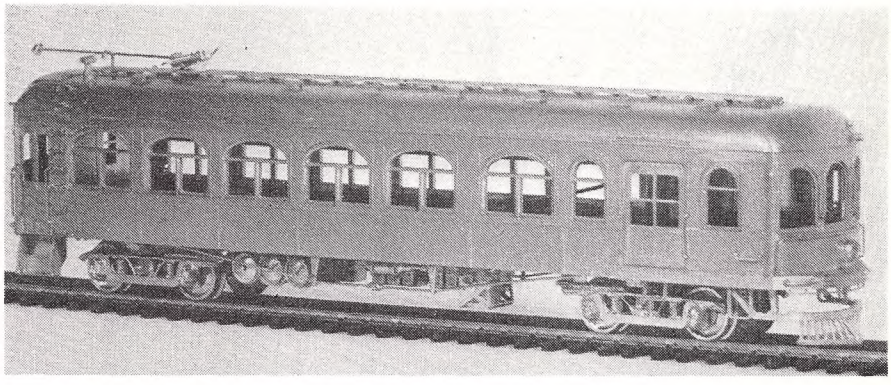
OTHER HO BRASS MODELS DUE IN STOCK BY THE TIME THIS ISSUE GOES TO PRESS . . .

From Westside . . . S.P. 'Fire Train', Virginian 2-8-8-8-4 Triplex (with 3 motors) and P.R.R. 'N-Isa' 2-10-2 From Sunset . . . P.R.R. 4-8-2 and P.R.R. H-8/9 2-8-0. From Alco Models . . . S.P. 'MK-6' 2-8-2 and from Overland Models . . . U.P. 'CA-11' Steel Bay Window Caboose.

THE MODEL DOCKYARD PTY. LTD.

'TANGERINE FLYER' INTERURBAN —NOW ON THE 'READY TRACK'.....

HO Illinois Terminal System '273' Series Combine, from the shops of KUMATA. Externally detailed down to the last nut and bolt, including all underbody equipment. Internal finish includes partitioned cab with master controller and motorman's air brake valve. Comes with radial coupler castings, etched window guards and acetate upper sash glazing with leadlight finish. Equipped with 'can' motor and all-gear drive. Insulated for overhead or 2-rail operation. PRICE: $234.25.



MODEL DOCKYARD CARRY IN STOCK OVER 400 DIFFERENT BRASS MODELS IN 'O', 'On3', 'HO' & 'HOn3' GAUGES. THE FOLLOWING ARE BUT A SMALL SELECTION FROM OUR CURRENT 'HO' RANGE:-

S. SOHO AND CO.

	Custom Brass Catalogue	$ 3.00
150	HO 4-8-4 NP 'A' Class Loco & Tender	423.00
72	HO 2-6-2 AT & SF '1800' Series Loco & Tender	215.45
3067	HO LIRR 1700 Series Steel Coach, w/trucks	40.60
259	HO 4-6-2 NYNH & H 'I-4' Class Loco & Tender	242.85
42	HO 2-8-8-0 PRR 'HC-1' Loco & Tender	729.00
41	HO 0-8-8-0 PRR 'CO-2' Loco & Tender	444.95
12	HO 0-10-0 C&O 'C-12' Loco & Tender	217.95
13	HO NYC 'S-3' Electric Locomotive	227.00
51	HO 4-6-6 TB & A 'D1a' Series Tank Locomotive	169.50
7	HO NYC Standard Coach	71.50
1061	HO NYC 'P-2' Electric Locomotive	214.50
18	HO PRR 'FF-1' Electric Locomotive	417.50
226	HO GN 'W-1' Electric Locomotive, with 2 motors	248.50
195	HO NKP Dynamometer Car	37.75
236	HOn3 2-8-0 D & RGW 'C-21' No 360 Loco & Tender	195.95
237	HOn3 2-8-0 D & RGW 'C-21' No 361 Loco & Tender	195.95
R225	HO New Haven '8200' Series Lightweight Steel Coach with trucks	40.50
R235	HO New Haven Grill Car-Coach, Lightweight Steel pattern with trucks	40.50
10	HO 2-10-10-2 Virginian Loco & Tender	743.00

CANADIAN DISTRIBUTORS

61	HO CNR GP-40-2 Diesel Loco (Frew & Gordon)	226.95
62	HO CNR GP-40 Diesel Loco (Frew & Gordon)	226.95
63	HO CPR Kettle Valley 5-Car Pass Set, painted (Van Hobbies)	513.00

ALCO MODELS

4	HO 2-8-2 SP 'MK-6' Loco & Tender	coming
137	HO RS-1 Diesel Locomotive	184.00
153	HO 6-8-6 PRR 'S-2' Steam Turbine Loco & Tender	523.25
157	HO Alco 'RS-3' Diesel Locomotive	196.50
159	HO Alco 'RS-2' Diesel Locomotive	196.50
178	HO 0-6-0 NYC Switcher & Tender	234.25
148	HO 4-4-4-4 PRR 'Duplex' & Tender, painted	511.00
160	HO 4-6-2 PRR 'K-4s' Loco & Tender, painted	490.00
3	HO NYC 'T-3' Electric Locomotive	123.50
116	HO PRR MU Coach, Non-motor	51.95
130	HO PRR MU Combine, Motorised	70.50
199	HO New Haven 'EP-5' Electric Locomotive	77.35
112	HO Virginian A-B-A 3 Unit Electric Locomotive	395.00
125	HO Virginian A Unit Electric Locomotive	132.00
238	HO New Haven EP-4 Electric Locomotive	171.50
30	HO 4-4-0 Ma & Pa Loco & Tender	201.00
14	HO UP 3-Unit Oil Fired Gas-turbine Locomotive, twin-motored, painted and finished	975.00
9	HO Alco C-425 Diesel Locomotive	223.00
22	HO 2-8-0 SP 'C-15' Loco & Tender	268.00
25	HO 4-8-2 SP 'MT-2' Loco & Tender	328.00
27	HO 4-8-2 SP 'MT-2' Loco & Tender with skyline casing	328.00

CITY & INTERURBAN CARS:

23	HO Illinois Terminal System 3-Car S/Lined Interurban Train	125.75
141	HO PE 5050 Hollywood Car	195.85
31	HO PE 5050 Hollywood Trailer Car	169.25
3054	HO Third Ave Rys '1200' Series Car	55.90
81	HO Double Truck Birney Safety Car (Plastic)	14.50
230	HO Pittsburgh Rys Jones Double End Low Floor Car	65.50
231	HO C.& L.E. Light Weight Hi-Speed Car	48.85
3047	HO Twin Cities '1300' Series Car	61.70
64	HO L.A. Rys 'H-1' Class Trolley Car	51.00
35	HO L.A. Rys. 'CE' Class Trolley Car	51.00
74	HO L.A. Rys. 'F' Class Trolley Car	51.00
203	HO L.A. Rys. 'B-8' Class Trolley Car	43.00
206	HO L.A. Rys. 'C' Class Trolley Car	45.00
211	HO L.A. Rys. 'H-2' Class Trolley Car	45.00
212	HO L.A. Rys. 'H-3' Class Trolley Car	45.00
213	HO L.A. Rys. 'D' Class Trolley Car	45.00
	HO 7' Baldwin MCB Pattern Truck Set, Comprising 1 Motor Truck, 1 Trailer Truck, 1 pair Drive Belts and 1 Twin Groove Motor Pulley. Use motor of your own choice.	30.20 set
	HO 7' Brill 27 MCB-3 Pattern Truck Set. Comprising 1 Motor Truck, 1 Trailer Truck, 1 pair Drive Belts and 1 Twin Groove Motor Pulley. Use motor of your own choice	30.20 set
3024	HO P.E. 1407 Class Steel R.P.O. Car	54.55
3023	HO P.E. 1459 Class Steel Express Car	54.55
71	HO Galveston-Houston 'Bluebird' Car	227.50
92	HO North Shore No 410 Parlor-Observation Trailer	143.85
131	HO North Shore No 410 Motor Parlor-Coach	166.50
161	HO North Shore No 420 Parlor Observation Trailer	143.85
163	HO North Shore No 420 Motor Parlor-Coach	166.50
16	HO Chicago "Big Brill" Car	159.95
100	HO C.A.& E. 300 Wood Motor Car, Niles Type	116.00
99	HO C.A.& E. 311 Wood Motor Car, Kuhlman Type	116.00
R175	HO TARS 400 Series Max-Traction Saloon Car	67.50
8	HO I.T.S. 273-283 Series Combine	234.25
	Catalogue of Suydam Interurban Cars	2.85
	Catalogue of Soho L.A. Rys Cars	1.25

(See our 'Railroad movie film list' for super 8 P.E. Training film and other traction films).

STREET & INTERURBAN LOCOMOTIVES

209	HO G.E. Steeple Cab Electric Loco with Arch Windows & One Trolley Pole (North Shore 450 Series)	74.70

UNITED PRODUCTS (UNPAINTED):

2054	HO ATSF 4-6-2 Loco & Tender	279.65
2043	HOn3 C.& S. No 1006 4-wheel Caboose	53.95
2042	HO 4-6-0 N.P. 'S4' Loco & Tender	129.70
2018	HO 2-8-2 P.R.R. 'L-1' Loco & Tender	392.50
2029	HO 0-8-0 B.& O. 'L-2' Loco & Tender	198.50
2060	HO 4-6-2 G.N. Loco & Tender	211.00
2035	HO S.P.T. & N.O. Loco & Tender, 4-4-0	179.75
2046	HO 2-6-2 N.P. 'T-1' Loco & Tender	232.65
2030	HO 2-8-0 B.& O. Loco & Tender	197.00
2008	HO ATSF 2-8-0 Loco & Tender	217.00
2005	HO 2-10-0 Frisco Loco & Tender	434.00
2007	HO 2-8-2 USRA Loco & Tender	478.00
2017	HOn3 2-8-2 D.& R.G.W. 'K-36' Loco & Tender	548.00
2058	HO 2-8-4 C.& O. Loco & Tender	458.00
2061	HO 4-6-2 D.& R.G.W. 'P-44' Loco & Tender	217.00
2000	HO 0-6-0 N.P. 'L-9' Switcher & Tender	251.75
2001	HO 2-6-2 Baldwin Loco & Tender	286.00
2013	HO 4-8-4 MOPAC Loco & Tender	816.00
2047	HO 2-8-0 Western Maryland Loco & Tender	153.50
2012	HO 2-8-0 NP 'Y-1' Loco & Tender	$189.95
2041	HO 4-8-4 RF & P Loco & Tender	764.00
2004	HO 4-6-2 SR 'PS-4' Loco & Tender	323.00
2010	HOn3 2-6-6-2 Uintah Tank Mallet Loco	555.00
2011	HOn3 2-8-2 D & RGW 'K-37' Loco & Tender	570.00
2019	HO 2 Truck Harrington Shay Loco	653.00
2015	HOn3 2-Truck Harrington Shay Loco	653.00
2014	HO 2-Truck Michigan No 2 Shay Loco	475.00
2003	HOn3 2-8-2 D & RGW 'K-27' Loco & Tender	564.00
2020	HO 3-Truck Hillcrest Lumber Co Climax Loco	533.50
2021	HO 2-Truck Michigan California No 2 Tee Boiler Shay Loco	511.00
2022	HOn3 2-Truck Michigan California No 2 Tee Boiler Shay Loco	coming
2016	HO 3-Truck San Joaquin RR Climax Loco	533.50
	Brochure of Current PFM Models	1.20

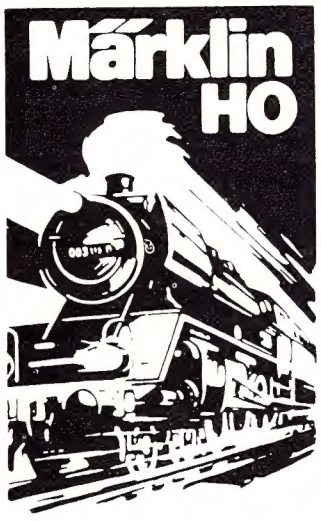
FOR A COPY OF OUR 7-PAGE HO/HOn3 BRASS CAR & LOCO PRICE LIST POSTED, SEND 0.95¢ FOR DETAILS OF THE O/On3/On2 RANGE, SEND STAMPED S.A.E.

SOLE AGENT & IMPORTER

THE MODEL DOCKYARD PTY. LTD.

216-218 SWANSTON ST. MELBOURNE. PHONE: 663 3505

SEARLE'S
ESTD. 1897



Full stocks of Marklin always available, also HAMO 2 rail 12v D.C. Marklin locos.

Mail Order Specialists

Shop C6 Wallaceway, Chatswood, N.S.W. 2067 Phone (02) 412 4238

EXPRESS MAIL ORDER

OO—HO—N SCALES

STOCKS INCLUDE: Lima — Mainline — Rivarossi — Peco — Romford.

BRITISH — EUROPEAN — AMERICAN — AUSTRALIAN PROTOTYPES

LARGE SAE for LISTS
(Including monthly SALE Specials)
Please advise scale and prototype required.

bankcard welcome here

P J P PRODUCTIONS
Since 1938,
20 Daly Street,
GISBORNE, Victoria 3437
Phone (054) 28 2170

MANSFIELD HOBBIES

100 Pacific H'wy,
Waitara, 2077
Phone 487 3188

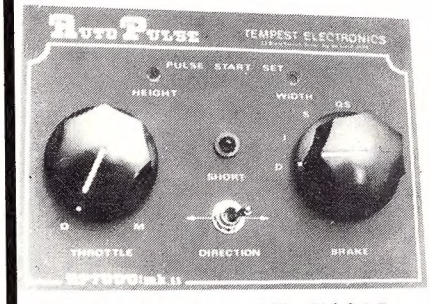
Lay-by Bankcard
Trade-ins Repairs

MARKLIN SPECIALISTS

Railroad Supplies: Lima, Hornby, Wrenn, Roco, Bachmann, Arnold, Rivarossi, Locomotion, H & M, Protype, Piko, Model Power, AHM, Peko, Ratio, Roundhouse. **Trackside kits, many makes. Books:** Kalmbach, Carstens, Australian Model Railroad. Scratch Builders' Supplies: K & S, Plastruct, Kadee, X-acto, X-po, Zona.

COME VISIT US, IF WE DON'T STOCK IT, WE'LL TRY AND GET IT FOR YOU! OPEN THURSDAY NIGHTS AND SATURDAYS.

New, Improved Design–Mk II



For further information, send 9" x 4" S.S.A.E.

TEMPEST ELECTRONICS
33 Borg St., Scoresby, Vic. 3179. Tel.: 763 5584

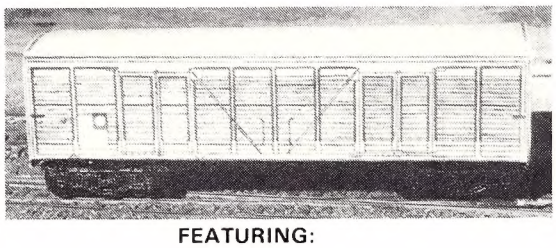
AP7000 AUTOPULSE
THROTTLE

Add a new dimension to your layout with this remarkable electronic controller. Drive your trains smoothly with speeds as slowly as ¼" in 30 seconds using throttle only (similar to rheostat) or . . . switch to "Inertia"; set the throttle and watch the train slowly build up to pre-set speed. Then bring it to a gradual stop or select from 3 other brake speeds.

- **Fully protected electronic circuit.**
- **2 year guarantee.**

$39·95 from dealers in your State.

Introducing Kard Kits, a low cost kit for modellers!



FEATURING:
* Low Cost
* Easy Construction
* Lightweight

KARD KITS
TOOROOKA. 2440

Available by mail order at $2.25 plus postage.
LIMITED INTRODUCTORY OFFER, BUY FIVE, GET ONE FREE!
Correspondents please enclose SAE. Trade Enquiries Welcome.

KARD KITS, TOOROOKA, 2440

(Body kit only, less bogies.)

TRAINTASIA
MODEL RAILWAY EXHIBITION

RAILWAY SPECIALISTS
EXPERT REPAIRS

wrenn RAILWAYS
MEHANOTEHNIKA
märklin
RIVAROSSI
lima
ROCO
L·G·B
PIKO MODELLEBAHN
Jouef
HEKI
PECO
ACCESSORIES HO + N GAUGE
VAU-PE
BRAWA
WIKING
kibri
POLA
VOLLMER
RELCO H.F. UNITS

MAIL ORDERS: P.O. BOX 86, MERMAID BEACH

2480 GOLD COAST HIGHWAY,
MERMAID BEACH, 4218 — PH.382103

IF FLEISCHMANN MAKES IT.....BILL WEBB SELLS IT!

Duty on English equipment is now the same as West German so... buy Fleischmann!

HO guage			NOW
4111	Tender Loco	$44.00	35.20
4247	British Diesel	80.60	64.48
5019	Breakdown Crane	12.00	9.60
5061	German coach 1st	13.20	10.56
5093	6-wheeled coach	15.00	12.00
5152	Belgian coach	17.50	14.00
5153	Belgian coach	17.50	14.00
5190, 5191, 5192 & 5193 set 4	Express coaches	77.00	61.60
5222	Flat car & truck	11.40	9.12
5232	Container wagon	15.50	12.40
5342	Refrig. wagon	12.90	10.32
5389	Bogie wagon	17.80	14.24
5408	Eva Oil tanker	10.30	8.24
5473	Aral Tanker	14.95	11.96
6012	Elect. uncoupler	8.90	7.12
6058	Elect 3 way point	29.60	23.68
6063	Manual double slip	17.50	14.00
6064	Elect double slip	25.50	20.40

N gauge			NOW
7094	0-10-0 Tank Loco	$78.75	63.00
7361	French Elect	72.50	58.00
7368	Swedish Elect	76.50	61.20
7432	Middle coach 7434	18.40	14.72
8151	French coach 1st	13.50	10.80
8152	French coach 2nd	13.50	10.80
8170, 8171 & 8172	Swedish coach set	38.70	30.96
8190, 8191, 8192 & 8193	German express set	56.40	45.12
8207	Gondola with load	5.50	4.40
8285	Auto transport	15.85	12.68
8330	4-wheel Box car	8.05	6.44
8336	Sliding panel wagon	12.20	9.76
8495	Eva Bogie tank wagon	11.70	9.36
9106	Flex track with track bed - 777mm	3.60	2.88

20% Off all This Stock UNTIL 30/04/80

POSTAGE EXTRA ON SPECIALS

märklin

Marklin. NOW IN STOCK Flex "K" track just $6.30 per length, Min 3 lengths by Mail add $1.50 post & pack

ALSO Marklin Electronic Controller $52.35

RIVAROSSI

VOLLMER

FLEISCHMANN

PECO

WIKING

kibri

KALMBACH

LOCOMOTION CONTROLLERS

HAG

MARKLIN

HAMO

SEUTHE

Smoke Generators

Smoke Generators to add realism from $8

SALOTA

Model Railway Control System

from West Germany.

Connects by just two wires

Simultaneous Independent Speed and Direction Control of up to 5 Trains on 1 Track - with Just 2 **Wires to the Track.** Suitable for gauges N., HO., O & No.1. - Special Units for L.G.B. and Marklin 3 rail system. Simple Installation - No need to alter existing layout - still use your present transformer. Control up to 10 trains using Overhead Catenary. Price... Command Desk and 2 receivers $250.00 for L.G.B $260.00 additional Receivers $32.56 each - L.G.B $35.82. For further details send 80 cents to Bill to-day

FOR THOSE WHO CAN AFFORD THE BEST, BILL WEBB SUGGESTS...

HAG

Magnificient Hand Crafted Models of Swiss Prototype electric 2 rail DC or 3 Rail AC HO Locomotives, Coaches & wagons. Locomotives have motor-block, housing and underframe of injection die-cast zinc. Powerful motor for outstanding running and hauling performance. Driving wheels are fitted with friction treads and all axles are borne on brass sleeving. All locomotives are convertible from Overhead to rail pick-up operation and have automatic light changeover. Hag Coaches are beautifully detailed, have steel chassis and die-cast bogie frames. Fully fitted seats etc. Hag goods wagons are die-cast. Hag models operate perfectly on all commercially available model railway systems.

Send 70 cents for Catalogue etc

Locos PRICED from $271.00 to $125.00

Coaches from $56.60 to 32.50.

Wagons $22.78 to $16.90.

CATALOGUES	POST PAID
ARNOLD 'N' GUAGE	$2.00
FLEISCHMANN HO & N	2.50
HAG HO GUAGE	.70
HAMO 2 RAIL DC	.25
KIBRI KITS	1.45
VOLLMER KITS	1.45
LOCOMOTION CONTROLLERS	.50
MARKLIN 1979/80	3.00
PECO HO	2.00
PECO N	2.00
RIVAROSSI to N.S.W.	8.65
INTERSTATE	9.75
SEUTHE SMOKE GENERATORS	.25

NEW ITEMS 1980.

FLEISCHMANN.
New Items brochure straight from Nurnberg Fair, send 50c for copy, price & delivery dates.

MARKLIN.
New releases for 1980. Some examples:-

HO - No.3153 Multi-purpose Electric Loco - Class 120 of DB.

Mini-Club - 2 new Locos No.8811. German Class 144 Electric and No.8896 Tank Loco. and in No.1 gauge Tank Loco No.5706 - 4-6-4 Class 78.

Send 30 cents for list, price and expected delivery date.

Locomotion Controllers.

2 Models exclusive to Bill Webb.

a) For 12 Volt DC Systems.
Controller with Inertia and 8 position Variable Brake and much more. Models for HO and N Just...$59.00.

b) For Marklin AC Systems.
Fully transistorised controller with Inertia and brake. Impulse reverse by special module Just...$68.00

See you at the BRISBANE EXHIBITION May 3, 4, 5. New venue.

LAY BY NOW ON JUST 10% DEPOSIT!

BILL WEBB

AUSTRALIA WIDE MAIL ORDER.

Showroom — 21 Meares Ave, Mangerton
Inspection by appointment only.

BOX 68, P O FIGTREE 2525 PHONE (042) 29 5824

MAIL CHARGES
Orders up to $15, add 80c
Orders $15 - $50, add $1.50
Orders over $50, Post free
Air mail, registered or C.O.D please add extra cost
Lay by on 10% Deposit

Please debit my Bankcard account number

Signature .....

Expiry Date .....

Please forward ☐ PRICE LISTS ☐ DESCRIPTION HO ☐ or N ☐ CATALOGUE

I enclose $ postal note/cheque

NAME _____

ADDRESS _____

_____ P/Code _____

AV1742

McBEES Hobby Centre

McBEES HOBBY CENTRE

P.O. Box 144 is registered at 535 Plenty Road, Preston. Items in this ad are a selection only. Any other enquiries please write. We are a licensed secondhand dealer.

Our shop is located at:
535 Plenty Road,
East Preston.

Hours: Mon-Wed 4pm-7pm
Thurs, Fri 12 noon-9pm
Sat 9 am-1 pm.

PLEASE all Mail orders to
P.O. Box 144 COBURG 3058

POSTAGE RATES:-

Post and packing MINIMUM $1.00
Additional charges:
On orders under $5.00 Nil.
$5.00-$14.99 extra 50¢
$15.00-$29.99 extra $1.00
$30.00-$49.99 extra $1.50
$50.00 and over Nil.
Airmail extra $3.00
Registered extra $2.50

bankcard welcome here

We welcome payment by BANKCARD. Please include number, expiry date and authorisation and signature.
For fastest service order on our order form with general enquiries on separate sheet.

SD SD2

OLYMPUS PEARLCORDER MICROCASSETTE SYSTEM

Why does a Model Railway shop sell tape recorders? If you have ever been out train-chasing, driving the car with one hand, holding your descendant of the Box Brownie in the other while trying to take notes with a pen held between the teeth all the while keeping one eye open for the Law, you may have an inkling to the reason.

Imagine a voice recorder which, with the appropriate module, will turn itself on and record at the sound of your voice and off again when you have noted engine number, date, exposure information etc. No more argument as to whether that loco was C64014 or W62. Want to know more? Then write for brochures and price lists. (They are great little gadgets for businessmen too.)

NOTE: McBees now accept payment using AMERICAN EXPRESS or BANKCARD credit cards.

BOOKS FROM KALMBACH

All About Signals	$2.50
HO Primer	$5.00
Track Planning for Realistic Operation	$8.45
764 Helpful Hints for Model Railroaders	$4.50
Bridges and Buildings for Model Railroads	$4.50
Scenery for Model Railroads	$5.00
N Scale Track Plans	$3.50
Track Plans for Sectional Track	$2.50
How to Wire	$5.50
101 Track Plans	$4.00
Small Railroads You Can Build	$4.00
Easy-To-Build Structures	$5.00
HO Railroad that Grows	$4.00
Practical Guide to Model Railroading	$4.00
Easy-To-Build Freight Cars	$3.50
N Scale Primer	$5.50
Traction Guidebook	$4.50
Practical Electronic Projects	$5.50
Railroads You Can Model	$5.00
How to Operate your Model Railroad	$14.45
The Westinghouse Air Brake Story	$3.00
Popular Model Railroads You Can Build	$6.45
Railroad Station Plan Book	$4.50
1928 Handy Railroad Atlas of the USA	$5.45
Scratchbuilding and Kitbashing Model Railroad Stations	$5.45
More Railroads You Can Model	$6.00
The ABC's of Model Railroading	$5.45
Creative Layout Design	$12.45
Building Plastic Railroad Models	$10.00
Modelling the Clinchfield in N Scale	$5.00
How to Build Model Railroad Benchwork. NEW!	$6.00
Our GM Scrapbook	$11.45
The Second Diesel Spotters Guide	$11.45
Diesel Spotters Guide Update — includes electrics	$8.45

BOOKS

For Union Pacific fans — UNION PACIFIC RAILROAD FREIGHT CARS — 1950's	$12.50
U.P. Motive Power Review 1968-77	$10.95
For Southern Pacific fans:—	
Bay Area Steam	$19.95
SP Motive Power Review 1977	$11.00
NEW! SP Motive Power Review 1978	$13.00

FOR THE SCRATCHBUILDER

Apart from the Stripwood and Styrene on the previous page. We also stock the range of PLASTRUCT products. Catalogue 75¢ — includes an Australian price list.

From MICRO SCALE	
Micro Set Setting solution for Decals	$1.40
Micro Sol Decal Softener with a solvent base for difficult areas	$1.40
Micro Mask	$1.40
Micro Krystal Kleer Liquid medium for model windows and lights	$1.40
From HOBSCO	
DDV Decal Dulling Varnish	$2.30
Solvaset Decal Setting Solution	$2.60
Goo All purpose adhesive	$1.60
Mikro Tip. Applicator tip for tubes of Goo — avoids waste (10 per pack)	$1.40
From MDC (ROUNDHOUSE) HO TRUCKS	
2918 Modern Roller Bearing	pair $1.40
2919 Heavy Duty Roller Bearing	pair $1.40
2922 Archbar	pair $1.20
2924 Fox	pair $1.20
2925 Roller Bearing	pair $1.20
2928 HOn3 Narrow Gauge, Archbar freight trucks — brass wheels	pair $4.55
2931 Std Pullman 6 whl Pass	pair $1.75
2935 Commonwealth 4 whl Pass	pair $1.40

WALTHERS STYRENE

6½"×12" Plain Styrene Sheet		
.010" thick, white opaque	6 sheets	$1.90
.015" thick, white opaque	4 sheets	$1.90
.020" thick, white opaque	3 sheets	$1.90
.040" thick, white opaque	2 sheets	$1.90
.060" thick, white opaque	1 sheet	$1.90
.015" thick, transparent	3 sheets	$1.90

DETAILS WEST HO SUPER DETAIL PARTS

Cooling Fan; 36" Cap-Top Type
For Radiator and/or Dynamic Brake
Use on F-7's, F-9's, GP-7's, GP-9's, GP-20's, GP-30's, GP-35's, SD-7's, SD-9's, SD-18's, SD-24's, SD-35's, E-8's, E-9's

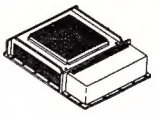
142 pkg(4)

Cooling Fan; 48" Pan-Top Type
For Radiator and/or Dynamic Brake
Use on Late GP-9's, GP-18's, GP-20's, GP-30's, GP-35's, Late SD-9's, SD-18's, SD-24's

144 pkg(3)

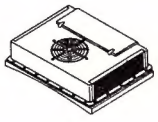
Cooling Fan; 48" Flared-Top Type
For Radiator use on EMD GP-20's

145 pkg(2)



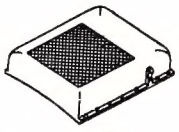
Air Conditioner; Vapor Type
Mounted atop Cab of 2nd Generation Hood-Units.

158 each



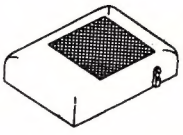
Air Conditioner; Prime Type
Roof Mount with Adaptor for GE Hood-Units.

159 each



Winterization Hatch; EMD F-Unit Type

163 each



Winterization Hatch; Type used on EMD GP-7, GP-9, GP-20, SD-7, SD-9

164 each

106 Rotary Beacon — Roof mount (2) $1.40
110 Snow Plow with Footboards: 1st and units of SP, WP, UP (1) $1.75
118 Steam Generator set. 1st Generation Hood units 3 pieces (1) $2.10
123 Spark arrestors. "Super" lifting type. Non-turbo-charged units (2) $2.10
140 Snow plow for 2nd Generation hood units for SP, WP, UP (1) $1.75
142 Cooling fan 36" Cap-top type. For Radiator and/or dynamic brake. Used on most F.GP. SD's, E8, E9 (4) $1.75
144 Cooling fan 48" Pan-top type. For radiator and/or dynamic brake. Used on late GP and SD's (3) $1.75
145 Cooling Fan 48" Flared-top type. For Radiator use on GP-20's (2) $1.75
155 Snow Plow. Common type fitted to hood units of numerous roads (1) $2.10
158 Air Conditioner. Vapor type. Mounted atop Cab of 2nd Generation hood units (1) $1.40
159 Air Conditioner. Prime type. Roof Mount GE Hood units (1) $1.75
163 Winterization Hatch. EMD F's (1) $1.05
164 Winterization Hatch. EMD GP-7, GP-9, GP-20, SD-7, SD-9 (1) $1.05
167 Fuel Filler. EMD Switcher Type (4) $1.40

Except for the styrene cooling fans and hatches DETAILS WEST parts are white metal.

UTAH PACIFIC HO

Lost Wax Brass castings.

60 5-chime Diesel horn — GE U-boats (1) $1.40
61 Speed recording drive — GE type (2) $1.10
63 Caboose marker with jewels (2) $2.80
64 Caboose marker lights with 1.5 volt micro bulbs plus green, red and amber marker lenses (2) $9.75
65 Axle wheel slip detector (5) $2.10
69 Exhaust stack GE type (1) $1.40
71 Pyle single Gyralite w/bracket (1) $1.40
72 Roof vents — cabooses, pass. cars $1.75
73 Caboose stack 27" high (1) $1.35
83 Snow shield, UP and Amtrack diesels (2) $4.20
86 Cast grab irons with NBW detail (12) $2.75

WESTONS FIGURES HO

1101	Handcar and Rider	$4.95
1108	Section Tools — 6 in set	$1.70
1119	Hand Truck	$0.70
1120	Lawn Mower	$0.70
1121	Saw Horses (2)	$0.70
1122	Step Ladder	$0.75
1123	Hammer and Saw	$0.55
1131	1914 Ford Roadster	$4.70
1133	1914 Ford Truck	$4.70
1200	Engineer	$1.85
1201	Fireman	$1.85
1202	Red Cap with Luggage	$2.10
1204	Station Master	$1.85
1205	Freight Brakeman hangs on Ladder	$1.85
1206	Freight Conductor	$1.85
1207	Freight Brakeman for Car Top	$1.85
1208	Dining Car Waiter	$1.85
1209	Pullman Porter	$1.85
1210	Lady-in-the-Lake	$1.70
1211	Hobo — seated with stick, fire	$2.05
1212	Hobo — reclining	$1.85
1213	Hobo — walking	$1.85
1215	Loafer	$1.85
1219	Mrs Spumoni and wash (set)	$6.10
1223	Woman Walking	$1.85
1224	Man Seated	$1.85
1225	Section Hand with Shovel	$2.10
1226	Section Hand with Wheelbarrow	$2.60
1227	Section Hand with pick	$2.10
1228	Old Man Walking	$1.85
1229	Young Man Walking	$1.85
1230	Sweater Girl — redhead	$1.85
1231	Flexible Freddy — painted	$1.85
1232	Flexible Freddy — unpainted	$1.85
1233	The Thinker	$1.85
1240	Lady 1890's	$1.85
1241	Telegrapher 1890's	$1.85
1242	Blacksmith with anvil, hammer	$2.25
1244	Engineer waving	$1.85
1246	Drunk	$1.85
1247	Mailman	$1.85
1249	Telephone Lineman	$1.85
1250	Section Hand with chain	$2.10
1251	Passenger Brakeman	$2.10
1252	Passenger Conductor	$2.10
1253	Lady's Clothes	$0.80
1254	Hobo seated with stick, bundle	$2.10
1255	Old Man Asleep in the Chair	$2.75
1256	Section Hand with pick, shovel	$1.95
1257	Sweater Girl, blonde	$1.85
1258	Blacksmith	$1.85
1259	Street Sweeper with Cart	$2.85
1260	Scarecrow	$1.90
1264	Franciscan Padre	$2.10
1266	Boy with Tyre	$2.05
1267	Girl with Tyre	$2.05
1268	Water Pump (2)	$1.15
1400	Dog, Scratching	$0.70
1401	Pigeons (6)	$1.70
1402	Collie Dog	$0.70
1403	Dog Sleeping	$0.70
1405	Hereford Cattle (12)	$6.10
1600	Rowboat with oars, plastic	$1.00
1604	Windmill, plastic	$1.40

CAMPBELLS PARTS HO

250	12 Wooden Barrels, unpainted	$1.50
251	12 Oil Drums, unpainted	$1.50
253	12 Oil Drums, black	$1.75
255	6 Brass Light Shades	$1.35
256	Chain, 12", 36 Link	$1.75
927	3 Cyclone Vents	$1.10
930	4 Park Benches	$1.10

We also have the range of 19 different Campbells windows and doors at $1.00 a pack and Corrugated Aluminium at $2.10 a pack. Write for Photocopy of illustrations of the Campbell/Weston range.

DETAIL ASSOCIATES parts are illustrated on pages 330, 331 of the 1980 HO WALTHERS Catalogue. We will supply photocopies of the range on request.

DETAIL ASSOCIATES HO

Detailing parts for Diesels and Freight cars. New items are released monthly, the following are in stock as this ad. is prepared.

1003	Dual Headlight, Pyle or EMD. Late type with Jewels	(2) $1.20
1004	Dual Headlight, Pyle Early type with Jewels	(2) $1.20
1008	Oscillating Dual Headlight, Mars with Jewels	(2) $1.20
1011	Dual Headlight, Pyle EMD SW Series type, with Jewels	(2) $2.10
1101	Lift Ring, EMD 3.5" Eye Bolt	(36) $1.35
1102	Lift ring, EMD, F&E Unit-nose	(6) $1.35
1103	Lift ring, Flat — mounts on pilot beam	(8) $1.15
1104	Lift ring tabs, Roof and Side hood mount	(16) $1.15
1201	Bell, EMD Cab mount	(2) $1.15
1301	Cab Sunshade	(6) $1.40
1302	Cab Sunshade, F&E Units	(8) $1.40
1401	Drop step, EMD Early GP, SD, SW Type	(2) $1.40
1403	Drop step, GE, U Series type	(2) $1.40
1404	Drop step, EMD Dash 2 series type	(2) $1.40
1501	MU Stand, EMD and Early	
1501	MU Stand, EMD and Early GP Type	(2) $1.20
1502	MU Stand, EMD and early GP type — high	(2) $1.20
1503	MU Stand, EMD intermediate GP, SD single	(2) $1.20
1504	MU Stand, EMD intermediate GP, SD Double	(2) $1.15
1505	MU Stand, EMD Late GP, SD type — single	(2) $1.15
1506	MU Stand, EMD Late GP, SD type — double	(2) $1.15
1507	MU Receptacles 3 types and 2 blank covers	(8) $1.15
1508	MU Air hoses	(16) $2.10
1601	Air horn 3 chime, Nathan	(2) $1.75
1602	Air horn 5 chime, Nathan	(2) $1.75
1603	Air horn, Nathan P3/P5	(2) $2.10
1801	Radio Antenna, can type for AT&SF, UP and others	(6) $1.20
1802	Radio Antenna, whip type for SP and others	(6) $1.20
1804	Radio Antenna, wagon wheel type. Photoetched brass with plastic castings	(3) $3.50
2201	Grab irons, scale size — includes plastic nut castings	(18) $2.25
2202	Grab irons — formed wire	(48) $3.15
2205	Coupler lift bar — diesel locomotive type — formed wire	(10) $2.80
2206	Eye bolt — formed wire	(36) $3.50
2207	SD Ladder kit — brass and plastic	(4) $3.55
2301	All weather window, double type for GP, SD Diesels	(2) $2.10
2303	Cab Armrest 24" and 36" stepped type	(4) $1.20
2401	Exhaust stack EMD F3/F7/F9 type	(2) $1.20
2601	Number board stencils — photoetched brass	(2 sets) $2.80
2701	Air Intake grille "Farr" F&E Units Photoetched Stainless Steel	(2) $4.20
2702	Alco 64" Cooling fan grille photoetched Brass	(2) $3.15
2703	Alco 57" Cooling fan grille photoetched Brass	(2) $3.15
2801	Brake Cylinders for Diesel Trucks	(8) $2.45
6205	Freight car running board corner grab — 12 formed wire grabs, 12 formed wire eye bolts, 12 plastic NBW	$2.80
6206	Freight Car air hose	(12) $1.40
6207	Freight Car long ladder	(10) $1.40

EVERGREEN SCALE MODELS

For those modelers who prefer working with styrene we now offer the range of Evergreen Styrene Building Materials.

V-GROOVE SCRIBED SIDING

6¼" × 10½" Opaque White sheets.

Part No.	Thick-ness	Spacing	Qty	Price
2025	.020"	.025"	1	$2.45
2030	.020"	.030"	1	$2.45
2040	.020"	.040"	1	$2.45
2050	.020"	.050"	1	$2.45
2060	.020"	.060"	1	$2.45
2080	.020"	.080"	1	$2.45
2100	.020"	.100"	1	$2.45
4125	.040"	.125"	1	$2.95
4188	.040"	.187"	1	$2.95

HO SCALE STRIPS

Dimensions are in HO Scale Inches. Strips are 13¼" long, opaque white and packed in resealable polyethylene bags.

Part No.	Size	Qty	Price
8103	1×3	9	$1.55
8104	1×4	12	$1.55
8106	1×6	12	$1.55
8108	1×8	12	$1.55
8110	1×10	12	$1.55
8112	1×12	12	$1.55
8203	2×3	9	$1.55
8204	2×4	12	$1.55
8206	2×6	12	$1.55
8208	2×8	12	$1.55
8210	2×10	12	$1.55
8212	2×12	12	$1.55
8404	4×4	10	$1.55
8406	4×6	10	$1.55
8408	4×8	10	$1.55
8410	4×10	10	$1.55
8412	4×12	10	$1.55
8606	6×6	9	$1.55
8608	6×8	9	$1.55
8610	6×10	9	$1.55
8612	6×12	9	$1.55

NORTHEASTERN SCALE NUMBER

We now have in stock the range of Northeastern Stripwood packaged in HO scale sizes. Each pack contains a number of 11" lengths of stripwood and is marked in HO and N scale sizes. The table below indicates the range available and the number of pieces per pack. e.g. HO scale 1×6 inches pack contains 20 pieces. All packs are $1.45.

All $1.45 Pkg.	WIDTH—H.O. Scale Inches						
THICKNESS—H.O. Scale Inches	2	3	4	6	8	10	12
1	25	25	25	20	20	20	X
2	25	25	25	20	20	20	17
3	X	25	25	20	20	20	17
4	X	X	20	20	20	20	20
6	X	X	X	20	17	17	17
8	X	X	X	X	17	17	17
10	X	X	X	X	X	17	14
12	X	X	X	X	X	X	14

McBEES
Hobby Centre Pty. Ltd.

MAIL ORDER SPECIALISTS

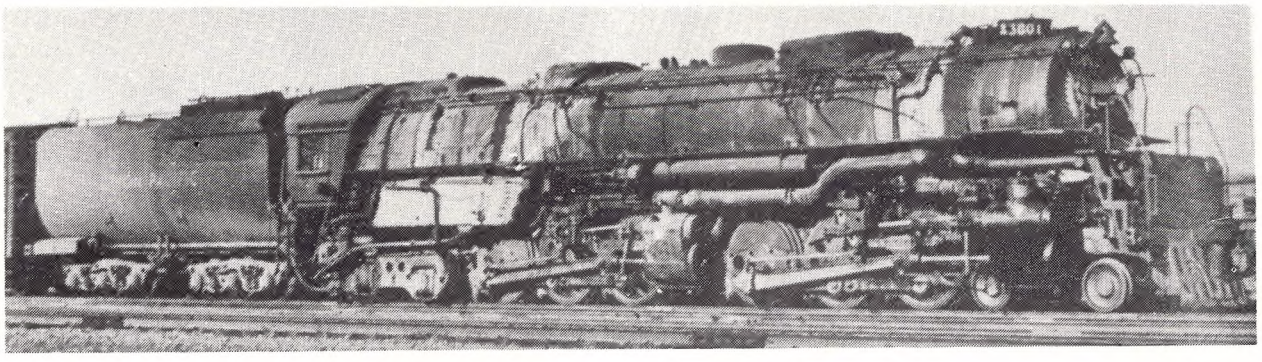
POSTAL ADDRESS:
P.O. BOX 144
COBURG, 3058
VICTORIA

TELEPHONE (03) 478 0038

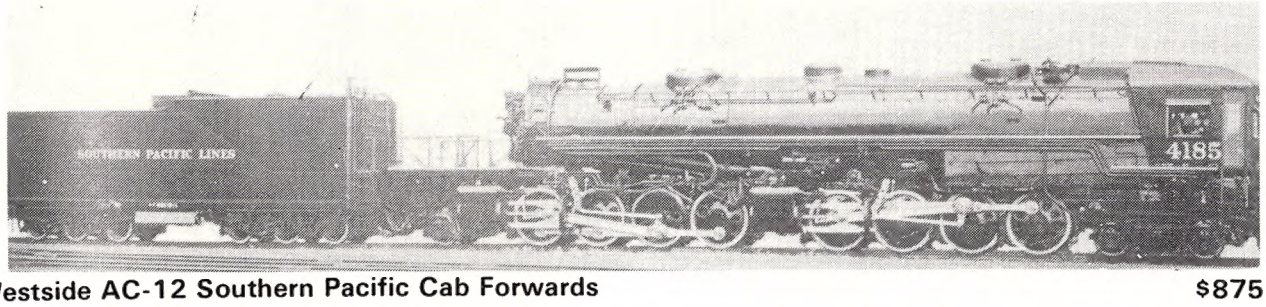
BARGAINS IN BRASS

HO and O GAUGE

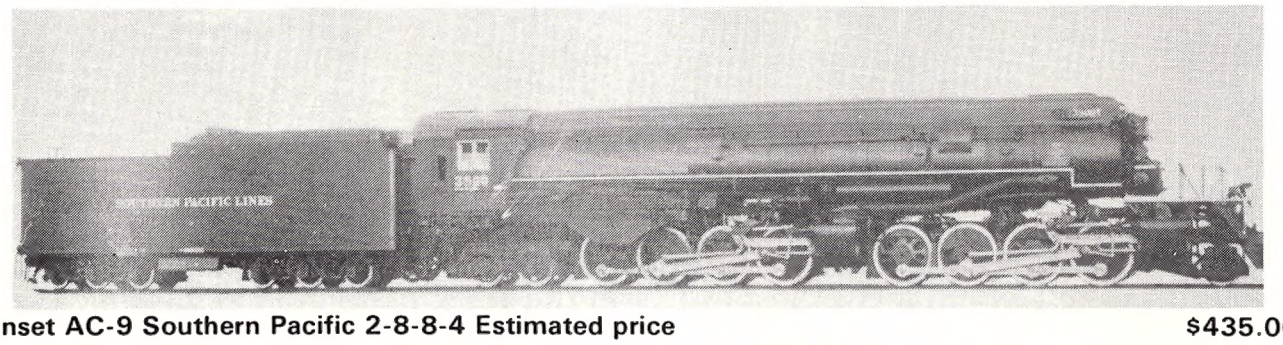
HO big steamers at BIG DISCOUNTS



Key early version Union Pacific Challengers **$518.00**



Westside AC-12 Southern Pacific Cab Forwards **$875.00**



Sunset AC-9 Southern Pacific 2-8-8-4 Estimated price **$435.00**

Now if you are a small steamer or diesel modeller we can supply your requirements at big discounts also.

O Gauge

Coming Soon:-
Westside 4020 U.P. 4-8-8-4 Big Boy from Japan
Westside 3920 U.P. 4-6-6-4 Challenger from Japan
Sunset Early Version 4-6-6-4 Challenger
Sunset 9000 U.P. 4-12-2

and others

Write or phone for information including our Sales Policy and Projection Lists for HO and O gauge Brass.

Railroad & Hobby Supplies,

141 Royal Parade, Alderley, 4051
Phone (07) 356 4951 a.h.

ARNOLD rapido N

LOCOMOTIVES

2052 German General Purpose Bo + Bo Diesel Loco type BR 218 in red & beige TEE livery - length 100mm, mass 88 g, driven on all wheels. Automatic changeover of lights with direction $79.95

2221 Old Time German Tank Loco - 0-6-0 BR 69, type Cn2 ex T3 - length 60mm, mass 45g - for use as shunter and branchline loco $38.25

2223 Old Time Prussian 0-6-0 Loco with tender type DB 89.63 - length 105mm - for branch line freight & passenger services $67.50

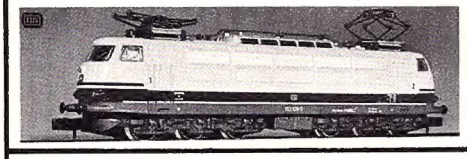
2350 Express Passenger Electric Loco - Co + Co wheel arrangement - length 123mm - lights change with direction of travel - optional overhead pick-up - for use on TEE and fast intercity trains $99.95

2465 Swiss 'Crocodile' Heavy Electric Freight Locomotive - 1+Co+Co-1 wheel arrangement - 121.5mm long - optional overhead pick -up . $175.00

2512 Mixed Traffic 2-8-2 Steam Locomtive with tender - German Railways BR 41 type - for use on medium to heavy weight trains - length 150mm - with three lights etc. $142.50

2530 Bavarian Express 4-6-2 Pacific Loco with tender - green - length 160mm - three lights, use with Rheingold, KPEV coaches and general purpose $133.95

2540 Bavarian Pacific, Black, BR18.4 - three lights - length 160mm - use with Rheingold, KPEV coaches and general purpose $133.95



FOUR WHEEL COACHES - Suburban & Branch Line Stock

3030 O.T. Prussian 3rd, green, end plat., 55mm ... $10.50
3040 O.T. 2nd/3rd, Prussian, green, end plat. 69mm $10.50
3050 O.T. Prussian Baggage, green, end plat., 62mm $10.50
3080 Branch Line Coach, green, 70mm, flush ends... $7.95
3081 Branch Line Coach, blue/white, 70mm $7.95

RHEINGOLD COACHES - 8-wheel, bogie stock

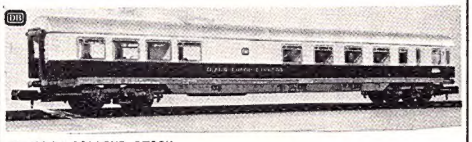
3302 Baggage Car, violet, 105mm long -..... $14.95
3312 First Class, violet and beige, 128mm long ... $16.50
3313 Second Class, violet and beige, 128mm long .. $16.50

K.P.E.V. COACHES - 8-wheel, bogie stock

3361 Sleeping Car, red, 125mm long $15.50
3362 Baggage Car, green, 125mm, 4-sliding doors .. $18.75
3370 Diner, red, 125mm long $15.50
3380 Express 1st/2nd, green, int. detailed, 125mm $15.50
3390 Express 3rd (T2), green, int. detailed,125mm $15.50
3391 Compartment 3rd (C4), green, 115mm $16.50
3392 Compartment 3rd. violet/beige $16.50

TEE COACHES - 8-wheel, bogie stock

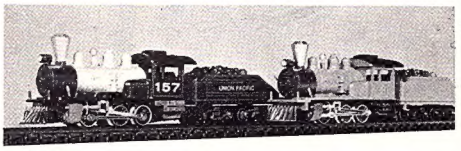
3810 Compartment Coach, 1st, red/cream, 165mm $15.50
3820 Aisle Car, single compartment, red/cream $15.50
3830 Bar/Lounge Car, red/cream, 165mm $15.50
3840 Dining Car, red/cream, 165mm long $15.50
3850 Dome Car, red/cream, 165mm $20.95



FREIGHT ROLLING STOCK

4480 Mine Cars, 2 in packet, 4-wheel $8.75
4482 Side Tipper BASF, 4-wheel operating $19.75
4483 Self-unloading Hopper, 8-wheel, operating ... $12.95
4484 Operating centre flow car, 4-wheel $16.25
(Note: Operating cars are designed for use with the Arnold Operating Factory)
4490 German Caboose (Guard's Van), green, 4-wheel $7.95
4680 Talbot (non-operating) Hopper Car, 4-wheel ... $10.50
4910 Well Wagon with transformer load, 8-wheel ... $14.95
4931 Heavy Transporter, 24-wheel $19.75
4961 Flat Car with crates, 8-wheel $10.50

Prices shown in this advertisement are recommended prices only and there is no obligation for dealers to comply with the recommendation.



AMERICAN TYPE LOCOS

2260 O.T. 0-6-0 Loco with tender, Western & Atlantic, red/silver, 110mm long $65.00
2261 O.T. 0-6-0 Loco with tender, Union Pacific, 110mm long $65.00
2262 O.T. 2-6-0 Loco with tender, black with assort. decals for different road names, 123mm long . $65.00

AMERICAN COACHES

3611 Old Time Shorty Combine, W. & A.„ yellow ochre $11.75
3612 Old Time Shorty Coach, W. & A., yellow ochre $11.75
3613 Old Time Shorty Combine, U. P., grey $11.75
3614 Old Time Shorty Coach, U.P., grey $11.75

** ** ** ** ** **

THESE FEATURED LINES ARE REGULAR, IN DEPTH IN STOCK LINES, PRICES ARE EXPECTED TO HOLD FOR THE NEXT THREE MONTHS OR SO.

** ** ** ** ** **

THE ARNOLD RANGE ALSO INCLUDES:-
- TURNTABLES - ELECTRIC AND MANUAL
- ENGINE SHEDS
- BRIDGES
- STATION BUILDINGS
- OTHER STRUCTURES
- TRACK, POINTS AND ACCESSORIES

** ** ** ** ** **

NEW LINES:

No. 6331 Loco Shed, 3-stall, 2 locos to 150mm and one to 90mm $20.75
No. 6462 Station Building with platform etc. 260 x 120mm. This building is suitable for all types of layout and prototype $22.95

** ** ** ** ** **

OTHER LINES FROM ARNOLD ARE IN STOCK OR AVAILABLE TO ORDER.

** ** ** ** ** **

ROUNDHOUSE PRODUCTS HO/OO

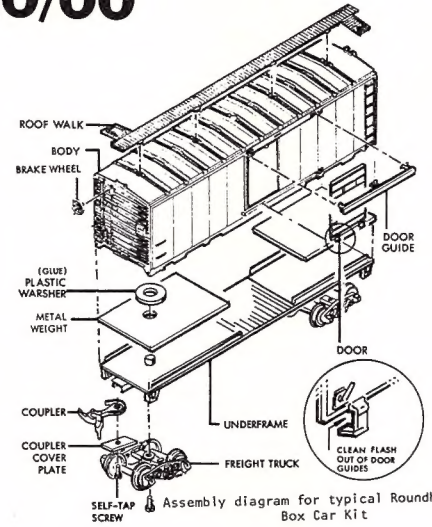
* PASSENGER & FREIGHT CAR KITS
* PASSENGER & FREIGHT BOGIES
* LOCOMOTIVE KITS
* ACCESSORIES

ORE CARS, 26' TAPER SIDE $3.75
1409 Pennsylvania
1413 Lake Superior & Ishpeming

SHORTY ORE CARS, RECTANGULAR SIDES ... $3.75
1402 Unlettered 1421 Duluth, Missabe & Iron Range

FREIGHT BOGIES ..... PAIR $1.25
2922 Arch Bar 2924 Fox
2923 Bettendorf 2925 Roller Bearing

FREIGHT BOGIES ..... PAIR $1.50
2918 Modern Roller Bearing
2919 Heavy Duty Roller Bearing

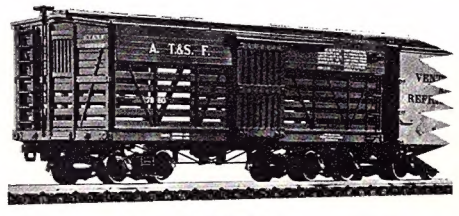


Assembly diagram for typical Roundhouse Box Car Kit

ROUND TOP BOX CARS $4.95
1080 Unlettered 1081 Pennsylvania
1082 Bessemer & Lake Erie
1083 Norfolk & Western
1084 Seaboard 1085 Baltimore & Ohio
1086 Santa Fe

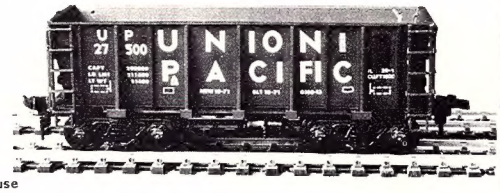
BOX CARS, 50' SINGLE DOOR $4.50
1201 Denver & Rio Grande
1213 Santa Fe

3-IN-1 KIT No. 1509 SKELETON LOG CARS .. $9.50



OLD TIMER STOCK CARS $5.95
3268 Colorado Midland

50' FLAT TOP BOX CARS, RIB SIDED ... $5.95
1823 Burlington Northern



HIGH SIDED GONDOLAS, 50' (THRALL) ... $5.95
1640 Unlettered 1647 Peabody 1643 Union Pacific

*** *** *** *** *** ***

WE ANTICIPATE FOUR THINGS IN THE NEAR FUTURE:
- SUBSTANTIAL INCREASES IN USA PRICES
- ARRIVAL OF LOCOMOTIVE KITS
- ARRIVAL OF HARRIMAN COACHES
- A NEW COMBINED LOCO AND ROLLING STOCK CATALOGUE

*** *** *** *** *** ***

PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE, BUT ARE EXPECTED TO HOLD AT LEAST TILL THE END OF APRIL.

*** *** *** *** *** ***

Prices shown in this advertiesement are recommended prices only and there is no obligation for dealers to comply with the recommendation.

*** *** *** *** *** ***

AMC DISTRIBUTED PRODUCTS from good hobby shops everywhere

LOCO OF THE MONTH

ALL METAL KIT
P.R.R. L-1 2-8-2 MIKADO
WITH TENDER
BY BOWSER
R.R.P. $97.93
OUR PRICE: $75.00
Write For Details.

TRAINS & TRACK
P.O. Box 177,
APPLECROSS 6153, W.A.

R. & A. MEARS

MODEL MAKERS & SUPPLIERS

Stockists of Plans, Books, Castings, Nuts, Bolts, Rivets, Materials and accessories for the Live Steam Constructor and for Scratch Building.

Send for Catalogue and Price List to:-

P.O. Box 85,
PADSTOW. 2211
N.S.W. Australia.
Telephone 02 773 3838

A.M.R.M.

MARCH/APRIL, 1980
Issue 101, Vol 9, No 8
AT ISSN 0045-009X

The official Journal of SCMRA in Australia. Incorporating the Yardmaster, bulletin of The Sydney Model Railway Society.

Published bi-monthly by SCR Publications of PO Box 235, Matraville, NSW 2036 for the Southern Cross Model Railway Association. All rights reserved and all editorial matter copyright. Registered for posting as a publication — Category B. Printed by Publicity Press Ltd, of 29-31 Meagher St, Chippendale, NSW 2008. All compilation, editorial and distribution work is carried out by voluntary labour on a non profit basis.

DISTRIBUTION: Subscriptions, SCMRA and SMRS members; hobbyships and Associations by SCR Publications; newsagencies and bookstalls by Gordon & Gotch (A'Asia) Ltd.

ADVERTISING: Details available from SCR Publications, PO Box 235, Matraville, NSW 2036. Phone (02) 661-4046 (evenings only).

CONTRIBUTIONS in the form of articles, photographs, club notes, hints, letters to the Editor, drawings or trade press releases are welcome for publication in this magazine. All items received will be acknowledged upon receipt. Please pack photographs between stout cardboard before posting. Indicate whether photographs are to be returned, and if trimming is forbidden.

SUBSCRIPTIONS: Rate (by mail); $7.50 per year (6 issues); overseas $10.20 per year. A limit of one year. All monies payable to SCR Publications at Matraville, NSW. Subscription starts with the first issue after receipt of money.

ADVERTISING DEADLINES: For all copy is as follows:-

May/June, 1980	18.4.80
July/August, 1980	18.6.80
September/October, 1980	15.8.80
November/December, 1980 ..	17.10.80
January/February, 1981	12.12.80

1980 CANBERRA MODEL RAILWAY EXHIBITION

All parties interested in either exhibiting a layout or conducting a display or trade stand at the Canberra Model Railway Club's 1980 exhibition and have not received details and application form should contact:
The Exhibition Manager,
21 Paloona Street,
Duffy, ACT 2611.

15th-16th NOVEMBER.

AUSTRALIAN MADE MATERIALS FOR AUSTRALIAN MODELLERS

These materials are locally made and as good or better than imported.
Roofing & siding sheets — .004" aluminium 150 × 75mm — Corrugated & Tray for HO — Tray only for N. 10 shts for $2.60.
Corrugated styrene — .010" — HO only 150 × 75mm — 10 shts for $3.10.
Scribed wood — 300 × 75 × 3mm — 8" plank, 12" plank and weatherboard — 5 shts for $2.50.
Cork Track Underlay — 900 × 31 × 3mm HO only — 5 lghts (15ft) for $2.50.

All Post Paid Aust.

G. DUNCAN
18 Waratah Avenue, Glenhuntly, Vic 3163.

SUPPORT MODRAIL

BACK ISSUES

The following issues are available subject to prior sale:—

No. 1 — April/May, 1963 (Reprint)
No. 39 — July/August, 1969
No. 40 — September/October, 1969
No. 41 — November/December, 1969
No. 44 — May/June, 1970
No. 54 — January/February, 1972
All the above are available at the price of 45¢ each, including post and packaging.

No. 74 — September/October, 1975
The above issue is available at the price of 60¢ each, including post and packaging.

No. 78 — May/June, 1976
No. 80 — September/October, 1976
Issues 78 and 80 are available at the price of 70¢ each, inlcuding post and packaging.

No. 88 — January/February, 1978
No. 89 — March/April, 1978
No. 90 — May/June, 1978
No. 91 — July/August, 1978
No. 92 — September/October, 1978
No. 93 — November/December, 1978
No. 94 — January/February, 1979
No. 95 — March/April, 1979
No. 96 — May/June, 1979
No. 97 — July/August, 1979
No. 98 — September/October, 1979
No. 99 — November/December, 1979
Issues 88 onward are available at the price of $1.10 a copy, including post and packaging.

No. 100 — January/February, 1980
Issue 100 is available at the price of $1.50 a copy, including post and packaging.

Please nominate a second choice, in case of non-availability of the required issue.
Please list issues required on a sheet of paper separate from any other matter.
If including stamps as part payment, please ensure that the face value of each stamp does not exceed the standard postage rate (20¢).
Please allow at least 21 days for the delivery of goods.

Post Your Order to:

SCR PUBLICATIONS
PO BOX 235,
MATRAVILLE, NSW 2036

ON THE COVER: In overcast and drizzling conditions Z4, an Australian National Railways (Tasmanian Division) locomotive, heads No. 172 Fingal Conara coal train. The load is 17 'QF' class coal wagons and a DB van. Michael Dix, took the photograph near Conara in August 1978.

This publication accepts no responsibility for the accuracy or reliability of articles or advertising contained herein, statements made or opinions expressed in papers or discussions, not do we necessarily subscribe to the views expressed or implied by contributors. Neither is any guarantee implied or expressed as to the good conduct or practise of advertisers herein. This publication reserves at all times, the right to refuse acceptance to any matter considered unsatisfactory for publication.
The Australian MODEL RAILWAY Magazine is published by SCR Publications, PO Box 235, Matraville, NSW 2036. Please address all correspondence to the Editor.

CONTENTS

THE LAKELAND RAILWAY	David Leaman	13
A GUIDE TO EXPOSURE CONTROL	Leon Oberg	16
HORSEBOXES OF THE NSWGR — 3 BKG and KKG Vehicles	Paul Rodgers and Adrian Compton	18
"... AND AFTER THE SAR CAME ANR"	Phil Curnow	22
MODELLING PROJECT: Build a BPV	Roger Johnson	25
SCENIC ROUTE		32
SAR's VINTAGE COMPOSITE BRAKEVAN 4074	Phil Curnow and Ray Love	34
THE TRACK	Frank Kelly	36
THINGS WE TAKE FOR GRANTED	Ross Hurley	37
RECODING OF ANR WAGONS	Phil Curnow	38
MODELLING TIPS: LIMA's SAR 8300 class Brake Van	Bob Gallagher	39
MAIL BAG		41
AMRM NEWS		42
REVIEWS		44
NEW MODELS		48

COMMENT

HISTORY NEED NOT BE DULL

We engineer our scenery and tracklaying to include viaducts, mountain passes and, for the more adventurous, zig-zags (switch-backs) to out of the way mines. Our imagination need not be so overtaxed.

History provides us with numerous appealing situations to model. There are several that come to mind. A short distance out of Perth 2-6-0+0-6-2 Garratts used to reverse their way up the Darling Scarp on the three leg Kalamunda zig-zag. Trains, however, always emerged at the top in reverse so, when the government took over the line in the 1920's, they added another zag at the bottom to right things at the top. Some of the bottom legs also led to rock quarries.

Up to 1919 the Main South Line through the Adelaide Hills blasted its way out of Sleep's Hill tunnel onto a frail iron viaduct that curved its way across two deep gullies. The line leading up served many gravel quarries too. Our attempts in freelance layout design to build in shunting difficulties for operating interest do not compare with the simply fascinating arrangement of quarry sidings that existed there.

You may think that deep viaducts passing in front of 50 metre high waterfalls is pure modelling extravagance. A twisting two foot gauge line on the west coast of Tasmania did that on its way to the mine at Williamsford. A photo of a train posing in the spray of Montezuma falls exists in the museum at Zeehan. Couple that with an aerial bucketway and a cable worked incline that is at Williamsford now and you have an area with intense modelling interest.

The Lithgow Zig-zag needs no description. But most of these features no longer exist on the prototype. How much more of an excuse do we need to re-create them in modelling form?

Ross Hurley

A.M.R.M.

Editor **Allan Brown** — Managing Editor **Bob Gallagher**
Associate Editor **Phil Curnow**
Editor (Reviews) ..... **Graham Ahern**
Assistant Editors (NSW) **Alan Templeman, Stuart Liversey, Paul Rogers**
Assistant Editors (Vic) .. **Ian Weickhardt, Peter Gibbs**
Assistant Editor (S.A.) .... **Phil Curnow**
Assistant Editor (Qld) ... **Max Chaseling**
Staff Artist (Illustrations) .... **Ian Thorpe**
Photographer ..... **Graham Ball**
Research .. **Bob Merchant, Phil Collins**
Assistants ..... **John Bevan, Arthur Robinson, Bill Kerr, Phil Jeffrey, Barry Eadie, Peter Vincent, Ross Hurley**
Draughtsmen ..... **Roger Johnson, Dave Taylor, Ray Love, Ian Stevens, Ron Wrigglesworth, Adrian Compton, David Wearne, Howard Armstrong, Tony Parnell, David Howarth**
Back Issues Manager ..... **John Casey**
Subscription Manager ..... **Ted Cole**
Distribution Manager .... **Trevor Moore**

Goldsborough Company's stock agent building nestles amongst the native pines on Ross Hurley's old Flinders Rangers HO layout. The building was cast in Plasti-Bond, in a rubber mould. The now ageing Amgoorie sign was copied from a photo of the 1910 period.

THE TOY WAREHOUSE
THE HOBBY WAREHOUSE

30 Kingston Road, Underwood, Qld. 4119 Telephone: 341 2662

AIRFIX RAILWAY

AIA-AIA Brush Diesel BR Green or Blue	$41.99
61XX 2-6-2 Tank Loco GWR Green	$45.99
61XX 2-6-2 Tank Loco BR Black	$45.99
0-6-0 4F Fowler LMS Black	$49.99
0-6-0 4F Fowler BR Black	$49.99
14XX 0-4-2 Tank Loco GWR Green	$43.75
14XX 0-4-2 Tank Loco BR Black	$43.75
4-6-0 Rebuilt Royal Scot LMS Black	$69.99
4-6-0 Rebuilt Royal Scot BR Green	$69.99
Coaches:	
LMS Stanier 57' Brake/3rd	$13.99
LMS Stanier 57' Brake 1st/3rd	$13.99
LMS Stanier Non Corridor Brake/3rd	$13.99
LMS Stanier Non Corridor Brake 1st/3rd	$13.99
BR Autor Trailer	$15.70
GWR Autor Trailer	$15.70
BR 60' Suburban "B" Set	$15.70
GWR 60' Suburban "B" Set	$15.70
Goods Rolling Stock from:	$5.50

MAINLINE

054-LNER J72 0-6-0T Green	$22.39
055-BR J72 0-6-0T Black	$22.39
050-BR ICO-Col type 4 Diesel Green	$27.75
051-BR ICO-Col type 4 Diesel Blue	$27.75
058-GWR Collett 0-6-0 Green	$39.98
059-BR Collett 0-6-0 Black	$39.98
052-BR Standard Class 4 MT Black	$54.50
053-BR Standard Class 4 MT Green	$54.50
056-LMS Rebuilt Scot 4-6-0 Black	$52.49
057-BR Rebuilt Scot 4-6-0 Green	$52.49
101-2nd Class Corridor SK BR Cream	$8.98
103-2nd Class Corridor SK BR Blue	$8.98
105-2nd Class Corridor (WR) SK BR Brown	$8.98
107-2nd Class Corridor SK BR Maroon	$8.98
102-Brake Corridor BSK BR Cream	$8.98
104-Brake Corridor BSK BR Blue	$8.98
106-Brake Corridor (WR) BSK BR Brown	$8.98
108-Brake Corridor BSK BR Maroon	$8.98
111-57' 1st/3rd Corridor BR Cream	$8.98
112-57' 3rd Brake BR Cream	$8.98
Goods Stock from:	$3.45
Catalogue — 42 pages	$1.50
060-LMS (Pres.) Rebuilt Royal Scot 4-6-0 Maroon	$49.99

LIMA

HO Scale Sets

1513 Diesel Goods Set	$19.45
2508 Steam Passenger Set	$27.20
3703 Transport International	$30.20
3813 Interstate Freighter	$30.85
4412 Indian Pacific	$47.25
5009 GWR Freighter	$46.35
6513 Santa Fe Freighter	$55.98

OO Scale Sets

3707 Steam Freighter	$42.60
4207 Road to Rail Terminal	$52.20
5806 GWR Branch Passenger	$67.45

HO Scale Locomotives

1626L-V80 German Diesel Loco	$19.99
1640-V200 German Diesel Loco	$20.85
1652L SNCF Diesel Loco	$11.20
1654L Diesel Loco Santa Fe	$13.59
1657 Australian Diesel Shunter	$11.65
1700L German Tank Loco	$28.45
1709L French Steam Loco W/Tender	(new)
1715M Steam Loco Class 219	$23.99
1716L Steam Loco Class 38	$45.59
3002L Steam Loco Mikada	$57.45
3003L Steam Loco Series 39	$53.25
3005L Steam Shunting Loco	$14.65
3006L Steam Loco	$19.45
3007DL Steam Locomotive CN	$16.10
3008M Steam Loco Great Western	$21.25
3009LA Steam Loco NY Central	$51.45
3014L German Steam Loco	$47.99
3015L Aust Steam Loco C38 Green	$47.99
3016L German Steam Loco BR10	(new)
8024L Dutch Electric Loco	$25.10
8041L Diesel Loco Co-Co	$22.39
8042L Aust Diesel Loco Class 44	$22.89
8043L Victorian Diesel Loco 'S' Class	$21.25
8051L Electric Loco Bo-Bo	$26.39
8058L Electric Diesel Loco	$21.25
8064L Italian Electric Loco	$26.65
8071L Diesel Loco FP 45 Santa Fe	$22.39
8082L Diesel Loco Balt + Ohio	$22.39
8116L Military Diesel Loco	$24.79
8122L French Electric Loco	$26.85
8123L Diesel Loco GM 32 Class	$23.22
8124L Diesel Loco Co-Co	$32.35
9600 Dummy Loco FP 45 Santa Fe	$11.85
9621 Dummy Loco 420 B + O	$11.85

OO Scale Locomotives

5101M 0-6-0 Class J50 Tank Loco	$23.65
5103M 4-6-0 'King' Class Exp Loco	$51.10
5106M BR Class 55 'Deltic Diesel' Loco	$21.25
5107M 0-6-0 BR Diesel Shunter	$25.89
5109M 0-6-0 LMS Diesel Shunter	$25.10
5110M 2-6-2 Prairie Tank Loco BR	$34.39
5111M 2-6-2- Prairie Tank Loco LMS	$35.49
5115m BR Class 33 Diesel	$20.85
5117M GWR 0-6-0 Steam Loco	$29.10
5118M BR Tank Loco	$29.10
5119M LMS 'Crab' Class	(new)
5121M BR Diesel Hydraulic Loco	$23.25

HO Scale Coaches

1023 European Type A	$6.85
1024 French Composite	$6.85
9109 NS First Class	$6.85
9112 Swiss First Class	$7.65
9126 Aust Overland Coach 1st Class	$6.25
9127 Aust Indian Pacific 2nd Class	$5.59
9138 Italian First Class	$6.10
9153 4 Wheel Coach	$5.25
9155 DB Silver Fish	$6.39
9157 DB Coach	$7.10
9167 Rheingold Pullman	$6.69
9169 Rheingold Dining	$6.85
9170 Rheingold	$6.85
9171 NSW 1st Class	(new)
9197 Military Coach	$6.25
9210 French 'Grill Express'	$7.10
9213 French Cinema Coach	$6.25
9215 Aust Overland Dining Car	$6.39
9216 Aust Indian Pacific Dining	$5.59
9221 Forum Exhibition Car	$5.59
9237 Swiss Sleeping Car	$6.25
9245 SBB Self Service	$7.89
9247 Aust Indian Pacific Power Van	$7.19
9305 NS Restaurant Car	$7.19
9309 German Luggage Van	$5.85
9311 French Composite	$6.85
9322 Aust Indian Pacific Sleeping Car	$5.55
9323 Aust Overland Sleeping Car	$6.25

OO Scale Coaches

5301 BR Intercity Corridor	$6.79
5302 BR Intercity Open	$6.79
5303 BR Intercity Brake	$6.79
5311 BR Corridor Composite	$6.79
5312 BR Maroon Corridor Composite	$6.39
5313 GWR Corridor Composite	$6.79
5314 SR Composite Car	$6.39
5315 BR Intercity Composite	$6.79
5321 BR Restaurant Car	$6.79
5322 GWR Restaurant Car	$6.79
5324 SR Restaurant Car	$6.79
5325 BR Restaurant Car	$6.79
5331 BR Corridor Brake	$6.79
5332 BR Maroon Corridor Brake	$6.39
5333 GWR Corridor Brake	$6.79
5334 SR Corridor Brake	$6.79
5335 BR Intercity Brake	$6.79
5341 BR Parcel Van	$6.39
5342 BR Maroon Brake Van	$6.39
5343 BR Brake Van	$6.79
5344 BR Brake Van	$6.79
5345 GWR Brake Van	$6.79
5348 SR Brake Van	$6.79

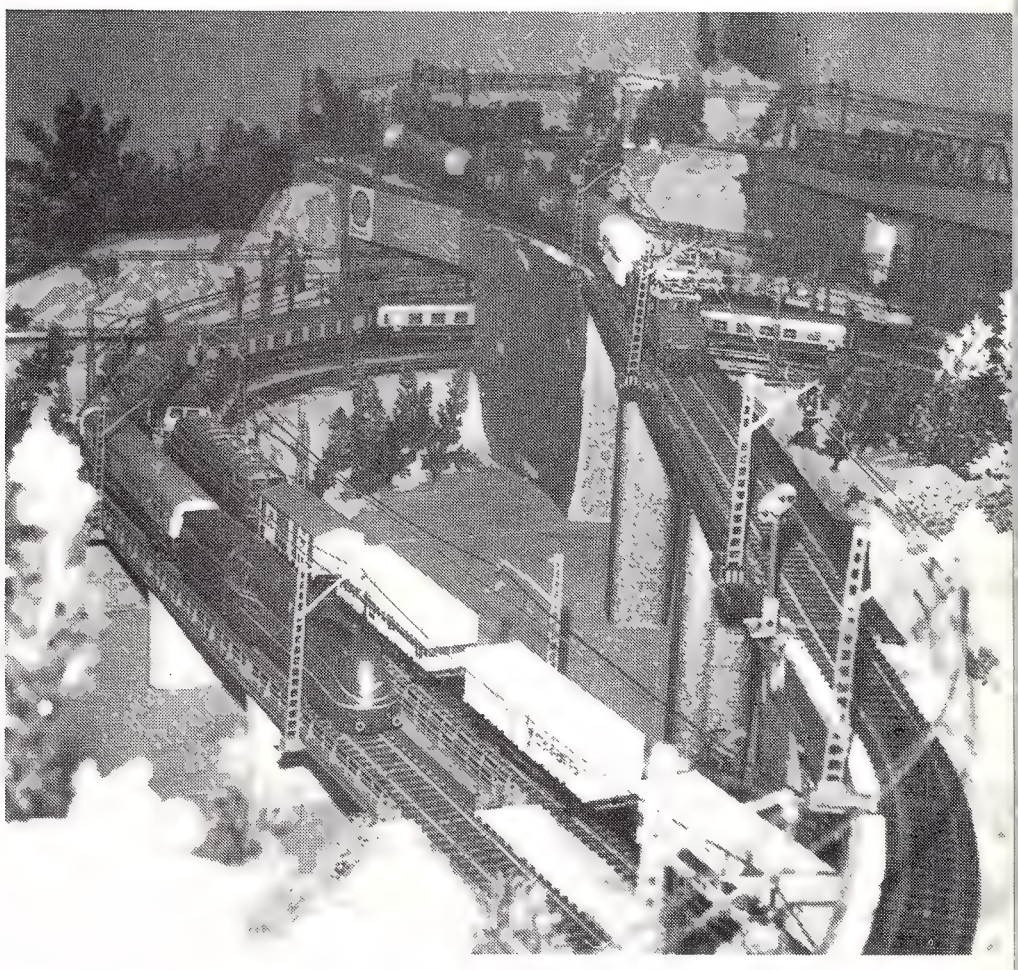
HO Scale Wagons

2711 Tank Wagon Esso	$3.79
2713 Shell Tank Wagon	$3.55
2802 Silo Wagon	$3.19
2810 German Wagon	$3.19
2811 Italian Open Wagon	$3.55
2819 Lowenbrau Wagon	$3.60
2825 French Wine Wagon	$4.29
2830 Lima Wagon	$2.89
2844 Hoechst Container	$3.55
2856 Container Wagon	$3.19
2861 Open Wagon	$3.19
2865 Aust Container Wagon	$4.29
2866 Aust Container Wagon	$4.29
2903 Mobil Tank Wagon	$4.45
2904 Shell Tank Wagon	$3.85
2912 Golden Fleece Tank Wagon	$4.45
2916 Texaco Tank Wagon	$4.45
3101 Norwegian Van	$3.45
3103 Interfrigo Wagon	$3.19
3105L SNCF Brake Van (W/Lights)	$6.95
3106 French Closed Wagon	$3.10
3107 Aust Closed Wagon	$2.79
3109 Carlsberg Wagon	$3.19
3113 Refrigerator Car Coca Cola	$3.10
3121 B + O Caboose	$3.19
3126 Santa Fe Caboose	$3.19

In addition to these listed items, our comprehensive range includes:-
ROCO, PECO, PIKO, HORNBY, RIVAROSSI, HURMO, AMRI, TYCO, BRAWA, ARWE, HEKI, HERPA, HELJAN, JORDAN, BACHMANN, KIBRI, MERIT, MERTEN, LILIPUT, MEHANOTEHONIKA, POLA, VAUPE, PREISER, RELCO, SANDER, WIKING, ROUNDHOUSE, H+M, AIRFIX, LIFE-LIKE, RAPIDO, BUSCH, VOLLMER, SHINOHARA, RATIO, K'S, KALMBACH, L.G.B. SUPERQUICK, BADGER MODEL POWER, C.A.R. BUILDER PLUS, PLASTRUCT, MANTUA, KADEE, ERG, MGW, ROMFORD, CAV'NDISH, ABS, GEM, HUMBROL, WRENN, XACTO, MINITRIX, KINGSPRINT, PROTOTYPE, TINY SIGNS, GRAHAM FARISH.

Mail orders are our speciality, operating on a same day service. We also accept Lay-Bys, Bankcard orders. Expert personal service available. We are open daily from 8.30 am until 5.00 pm with late night trading on Thursday until 9.00 pm, Saturday 8.30 am until 12.00 noon.

We look forward to being of service to your club and members, and Catalogues are available free on request.



THE LAKELAND RAILWAY

Photos and article by David Leaman

The Lakeland Railway is based on continental material of German or bordering prototypes in a three part matching scenic setting — North Sea port, south German lake country and the borderland Alpine front. The parts are physically separated giving the illusion of discrete regions without conflict.

Scenery:

Apart from the majority of the buildings scenic effects are hand made. Landforms are made of at least two thicknesses of newspaper laid and glued while wet to a plastic screen mesh laid over supporting blocks and frames. The surface is finished with three coats of flat latex paint and the result is light, firm, matt and easily repaired or modified. Previous layouts using reinforced plaster often demanded the equivalent of a rock drill for alteration! Trees are the dissembled pieces of two moderate — sized Christmas trees. Cliffs and rock effects were produced by adding irregular amounts of quick drying plasterboard cement to the paperwork base.

Equipment:

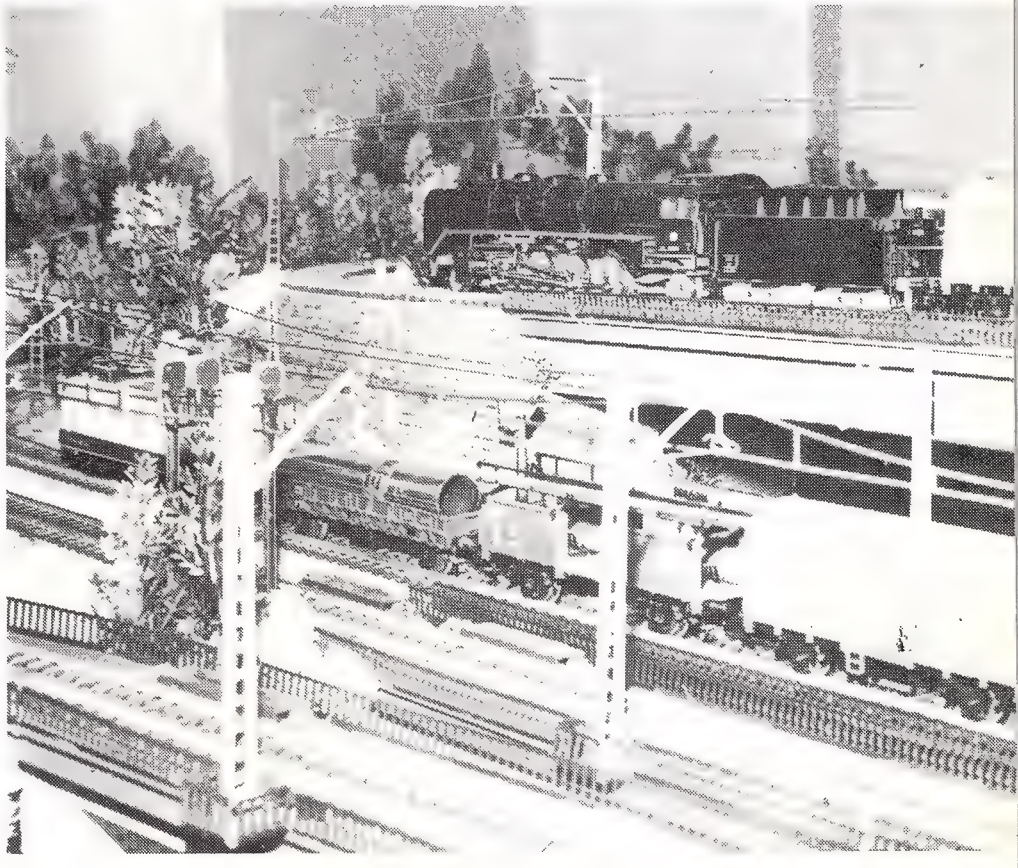
The Lakeland Railway uses Marklin HO equipment and is the third major Marklin layout built. Plastic based track has been used throughout for improved appearance. Marklin was chosen some years ago after experience of Hornby gauges 0, 00 (00 in 3 and 2 rail) and Triang. 2-rail DC was found to be restricting and electrically complex if intricate, workable and realistic designs are desired with minimal wiring and switching. An AC system was selected for the overall flexibility it allows and it is noteworthy that forthcoming control systems are AC based. The "3-rail" stud aspect simplifies most electrical problems — but the track had to look right and work well.

Layout:

The layout fills an irregular basement area and was built in three stages on a base of 12 and 19mm particle boards. The stages yield the various geographies and railway demands with town names reflecting the terrain. Each area provides destinations and industrial purpose.

The first stage formed the layout core and included the major terminus of Lakeview, the holiday resort of Lakeside with a through station and passing loops and a lengthy contorted double line oval. Lakeview, on its elevated plateau, is connected to the double main line by a graded single line branch and two junctions. Trains may be fed to either main line; being fed in at one junction and collected at the other. This option is only exercised today for certain Lakeside locals since the whole system now works to the right hand rule. With electrification stage one could support six independent motions. Lakeview terminus allows all marshalling options, loco swaps or turn around, loco fueling and train reversal.

The second stage extended the layout from the main area into an L-shaped alcove under the front door and steps. This stage includes the small junction town of White Falls, the industrial centre of Montvale and the town of Mountview. White Falls junction is the link point for trains from Montvale and Mountview to Lakside and Lakeview. Mountview rests on high ground and is reached by a spiral. Montvale is fully concealed, consists of two reversing loops and is a 'fiddle' station. All



Above *The morning boat train from Portlea via Lakeview passes a container train headed for Portlea. Overhead a load of tankers has just left Lakeview for Lakeside.*

Right *An express goods for Lakeside and Montvale with a cl 41 2-8-2 in charge overtakes an electric-hauled mixed goods for Mountview.*

A railcar set climbs over White Falls underground station on the first turn of the spiral to Mountview.

Typical local service from Lakeside climbing toward Lakeview. Lakeside in background. The bridges span a removable section of baseboard which allows access to the rear of the layout.

routes are electrified and single line.

The third stage developed a corner of the basement room previously occupied by shelving and a desk and created a port town — Portlea. Development of destinations such as Montvale, Mountview and Portlea really opened up the basically oval layout. Electrification of the Portlea branch is planned.

Normal grades are 1 to 1.5% but short sections of 2.5 to 3.5% are included on branch lines — especially to Mountview. The control position is central to stages one and three but all operations at White Falls and Mountview are undertaken using a mirror wall section.

The layout includes features developed in two temporary experimental designs. The original intent was for provision of realistic terminus and marshalling operations and an uncluttered railway in open countryside. Integrated system operation to German practice was not then contemplated.

Operation:

The layout is designed for one man operation and has been run as an integrated railway operation since completion of stage two. The design allowed easy evolution (and conversion in thinking) since its parts worked realistically. The change was probably inevitable and began after stage one was functional. Six train operation was possible but not safe and an interlocked main line/junctions automatic block system was installed. The system has been extended to cover all junctions.

A long extinguished fire of timetabling was rekindled after stage two and the reasons for past failures overcome with a fast clock and much evaluation of loco running, loads, grades, timings etc. The modified digital clock allows ½ to 20x factors with a freeze switch for the nervous operator, dinner calls or restarts. As the layout includes two through stations (Lakeside, White Falls), three termini (Lakeview, Mountview, Portlea) and one turning end point (Montvale) there is plenty of scope for passenger and goods working.

Trains may be operated on the layout in various ways. Using the perspective of Lakeview some examples are: 1) out to the main line, then in either direction to Lakeside and return; 2) as for (1) but with several laps of the oval; 3) out to the main line, across to the Portlea branch or around the main line to the White Falls exit and then to either Mountview or Montvale; 4) as for (3) out with several laps of the oval before 'reaching' the White Falls exit; 5) combinations of (2), (4) so as to extend running time. Since the layout has a monstrous train capacity for its size a single operator needs breathing space for coach turn around or marshalling. Thus a train to Mountview leaves Lakeview, runs down to the main line, takes two laps to Lakeside, a further ten to the White Falls exit, runs up the branch to White Falls and then enters the spiral for Mountview. This procedure is workable, makes for a good display and is not visually bad since half the main oval loop is concealed.

The length of the main line is 17 metres and is equivalent to 1.5 scale kilometres of real time or 9 kilometres using a 6:1 clock. Thus the train for Mountview actually covers 204m plus the length of relevant branches or 221m (117km). The 'Valkyrie' (crack express) is timed over this route in 45 scale minutes or an average speed of around 150kph.

Nighttime operation is undertaken by lamplight emanating from the layout itself; all coaches, towns and stations having been recently fitted with appropriate lighting.

Statistics:

The Lakeland Railway contains 135m of track in an area of 18 square metres. Twenty

Overall view of Lakeview terminus and steam/diesel loco facility late on a winter's afternoon. Trains for Mountview, Lakeside and Montvale await peak hour loads.

two locomotives (7 steam, 7 electric, 8 diesels) provide the motive power for 26 coaches and 85 wagons. Three locos are rostered to shunting duty, one for each terminal zone. All 48 points (including slips and trebles) and 45 signals are electrically operated and all are relay interlocked. Over two kilometres of wire has been buried under the scenery. The layout contains only 17 uncouplers and nearly half of these are placed at platform buffer ends for loco detachment. So few are needed because humps are installed at Portlea and Lakeview and several locos are fitted with the Marklin Telex coupling system. These two features allow complete flexibility.

Timetabling:

The present timetable contains slots for up to 34 long distance services, 10 short range linking freights and 16 return local services in a 4 hour cycle at 6:1 clock rate. The actual services run are governed by the day-year rule, there being substantial variations between summer, winter or holiday schedules even though built on the same skeleton of basic services. Marshalling and loco turn around impose the main restrictions on scheduling at scale speeds. Incident cards, breakdowns (very rare) or accidents (also rare) lead to special operating rules. All accidents are the subject of an enquiry and accidents resulting from some malfunction of the blocking lead to a full investigation and Enquiry Board report.

Goods trains:

Goods wagons are organised on a contract or request basis. Contract wagons form the skeleton of most goods services and the trains are filled out by requested wagons. If requests are excessive additional services or holdovers may be required. Request wagons are not determined according to real or imagined industries by the lineside but by a random card draw and a destination weighting system. Only contract wagons correlate with lineside effects.

Orders are correlated with schedules and a set of train formation cards are made up for several 'days' in advance. Apart from the formation cards (essential to one man operation) and a record of the draw no other paperwork is needed. Where possible wagons have layovers of 12-36 scale hours. Layovers at Montvale are normally 4-6 hours, a restriction imposed by its 'fiddle' station status.

Conclusion:

Developments on the "Lakeland Railway" have convinced me about the satisfaction of realistic model railway operation. The Lakeland Railway offers an example of dense traffic on a basic oval plus end to end layout under one operator which contrasts markedly with published American model practice. The layout could be run by a crew and its reserve capacity is such that a significant service increase would result.

RUN! Lunchtime local behind class 141 electric about to depart Lakeside for Lakeview.

A GUIDE TO EXPOSURE CONTROL

PHOTOGRAPHICALLY SPEAKING
CONDUCTED by Leon Oberg

A saying often heard in railway photographing circles is that to obtain a better black and white picture, it is necessary to over-expose by one stop.

Apart from just one or two definite situations, such as shooting really dirty locomotives (those that would be toneless) in very poor light — or shooting against a hazy sun, phototgraphers should try and shoot according to exact light readings.

From experience in a number of my photographic schools for various organisations, I find that the biggest majority of photographers are experiencing trouble taking accurate exposure readings. I have had a few readers raise this same question only recently.

Generally speaking the light meters in current single lens reflex cameras are accurate enough to take excellent outdoor colour and black and white pictures. It is only when shooting in low light situations such as inside workshops, and night scenes that many of these meters break down.

But returning again to the outdoor situation, the greatest 'mistake' being made by many photographers is their tendency to take sky readings in error. Often this is due to the nature of the photography as in railway situations, all readings for in-the-field action shots must be taken before the train actually arrives, and more often than not, the camera is pointed slightly upwards to record the scene. As a result, this prior-reading will often carry the extra light from the sky and as a consequence, provide an underexposed result (particularly on dull days). Shooting trains on bridges also fall into this same category.

So too do static locomotive shots in depots on dull days, particularly if the viewfinder is not filled to capacity when obtaining the exposure reading. In this latter situation, it is far better to walk up to the locomotive or vehicle, run an exposure check, then return to the shooting point.

But on bridges, or in-the-field, it is not this easy for very few crews can stop for us in the section while light readings are taken. Generally speaking however, if the locomotive being photographed are reasonably dark (such as those in NSW, Victoria or Hamersley Iron), the reading should be taken off the ballast or in the case of a bridge, the darkest well lit sections of a girder (and not some bright concrete pier).

Should the subject be reasonably bright, an ideal reading is often mid-way between the ballast and the sky, or in the case of bridges, between the bright pylons and the general surrounds.

Exposure readings inside depots at night are a totally different kettle of fish as many meters actually stop working at exposure combinations slower than ½ to 1 second. Because a small aperature is usually required in such cases for depth of field considerations, exposures as low as 3 to 4 seconds are often necessary under these conditions. Usually the very expensive cameras are 'very expensive' because they maintain accurate light readings up to, and beyong these situations. For instance, instruments which are fitted with diode read-

Right:
This picture clearly illustrates what happens if a train is pictured against a bright sky on a dull day if exposed normally. The result is flat, lacks detail and as far as publication is concerned, is not really suitable. In situations such as these, it is all too easy to have the camera's light meter influenced by the mass of sky. If such pictures are unavoidable, a reading must be taken off the lower ground and ballast section (see text). Actually, when I arrived at this delightful location, the sun was shining, but as often happens, a big cloud arrived just before the train. The scene shows NSWPTC 4526 with an Up wheat train near Towrang in 1973. (Nikon F photomic, 50mm lens, FP4 rated normal).

out (the L.E.D. system) are equipped with a special low-light silver-oxide batteries. One such brand which comes to mind will allow readings in this conventional way down to 8 seconds duration at fl.4!

But even with these kinds of meters, they still have to be read right.

Other high performance cameras which have come onto the market recently, are the classic electronic shutter (shutter-priority) machines. These are now providing accurate readings as low as 30 seconds and I have said it before — and still maintain, that cameras such as these are the best investment for all-round railway photography and for those few situations where the photographer requires full 'personalised' control over the exposure, they can all be switched to manual and used as a conventional unit.

For those who maintain it is necessary to overexpose to punch out that little extra contrast, it is actually a fact that overexposure leads to duller images. The more overexposed a picture is, the more blurred it becomes through light spill. The best way to punch out contrast is to slightly over-develop the film during processing. It is chemistry which plays the important part in photography. One can in fact shoot to his own desires if he understands fully his chemistry. For instance, if a photo session is to be enjoyed with really bright locos in bright summer sunlight, one can soften the result by down-rating the film by a stop and processing accordingly. Alternatively, if the day is dull and the subject matter dark, the method I employ is to up-rate the film speed and over-develop. In actual fact, neither of these cases calls for over-exposure. They both successfully underexpose the film! The chemistry controls the result.

But one word of warning, do not rely exclusively on your light meter, for should it fail in the field through jarring, or due to battery failure and start providing false readings, you may not be instantly aware of the problem and ruin many valuable and expensively obtained shots. The best method is to carry a few basic exposures in your head which are allied to the film most commonly used. For instance with 64asa film, a reading of 500th at f5 should be implanted in the mind of all users for sunlight work. With 125asa film, the operator should instantly be able to retrieve from his mind an exposure in sunlight of 500th at f8 (or a fraction under for the southern states). I then use the camera's light meter only as an aid. If the lighting varies just a little it is quite in order. However, once readings of over one, two or three stop variation are coming one will instantly be aware of a meter problem.

Another idea is to swap readings when shooting with a party and whilst the operator with a tele lens will often have a varied reading, cameras reading vastly differently when using somewhat similar lenses can be usually treated as suspect.

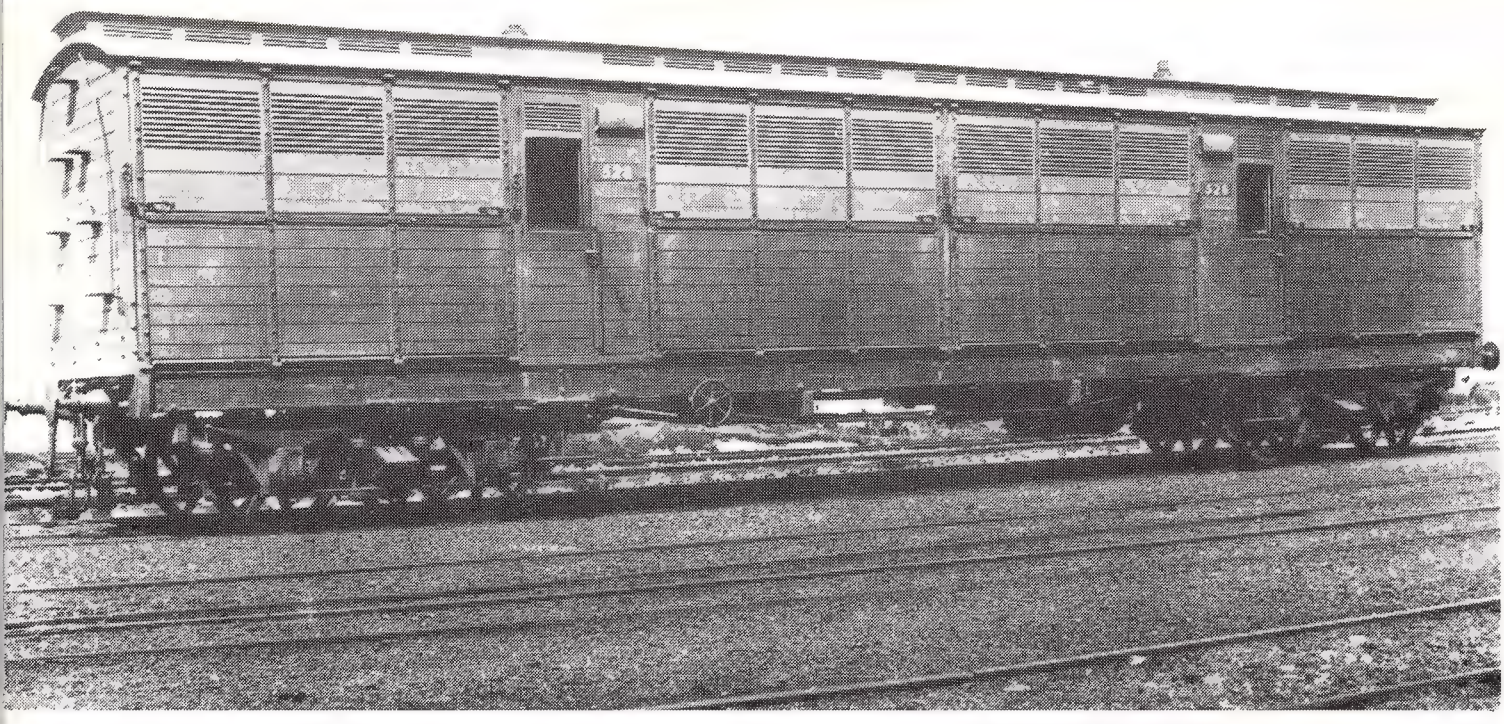
Perhaps the hardest railway pictures of all to obtain ideal light readings with are those fully light-saturated scenes around dawn or sunset. Apart from the soft orange-pinkish light, such scenes will lack all contrast and shadow cut and extreme care must be taken.

The other really difficult light reading situation is those nuisance half cloud, half sunlight days when the shadow from a cloud arrives on the loco just when the train appears. And the rest of the train is sunlight. It has happened to me so often and as a result of this experience I must confess that there is little one can really do about it short of asking the driver to stop and wait for even light. Unless the picture is a 'once in a lifetime', I usually put the camera down when this uncontrollable situations arises, for the result will usually be useless for either publication or exhibition purposes.

The enclosed photographs attempt to illustrate some of the areas discussed today and if just a handful of readers make better exposures as a result of this brief story its job will be done.

Right
A bright locomotive against a bright shed background on a bright sunny day in a light-absorbing wide-open space can be quite a difficult picture to take because of harsh lighting gradations. This picture of Lysaghts' (Port Kembla) Bo-Bo No. JL4 posing for me on the plant in 1975 carried all the above problems. Had I down-rated the film slightly, a softer-detailed result would have transpired. Instead, I am left with far too much contrast, even though the print is made from a very soft paper grade (Ilford grade 1).

Left:
This is a case of punching as much contrast out of the scene as possible, being an extremely dull day in March 1979, the occasion NSWPTC brand-new unit No. 8006 worked its first passenger run south with No. 35 Goulburn day train. Selecting an equally toned background so as to avoid too much ultra violet, I was able to up-rate the normal HP5 (400asa) film to 800asa, thus providing that litte extra contrast and detail. (Nikon F2 photomic 1000th at f.8, 135mm lens).



BKG 528 with clerestory roof. N.S.W.P.T.C. photo.

HORSE BOXES OF THE N.S.W.G.R. — 3

BKG and KKG Vehicles

Previous articles in this series were:-
Sept./October 1979 — DKG/KG vehicles
Nov./December 1979 — MKG/KG & SKG/KG vehicles.

— Compiled by Paul Rogers
— Research conducted by Don Estell, Paul Rogers and Keith Seckold
— Plans by Adrian Compton

BKG type Vehicles

Bogie horse boxes first appeared on the New South Wales Government Railways during January 1894, at which time the first pair of BKG vehicles, nos. 528 and 529, were commissioned. They were followed in June 1899 by a third unit, no. 537, in December 1904 by no. 686, and in September 1910 by no. 780. Early examples of the BKG were built specifically as replacements for sets of obsolescent four-wheeled horse boxes.

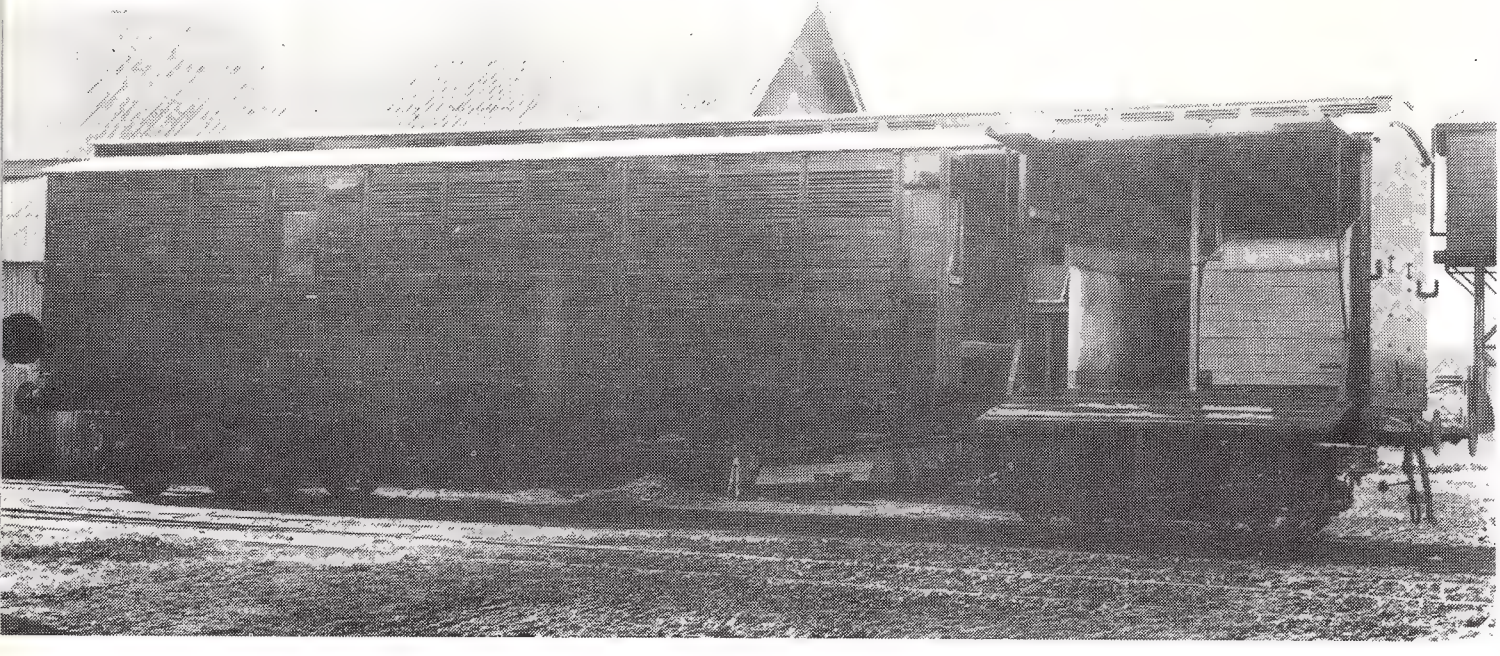
These five boxes, provided by Eveleigh Carriage Workshops, Redfern, were clerestory roofed, timber underframed carriages which tared around 21 tons 19 cwt, and held 12 horses and 10 jockeys, grooms and attendants. The animals were accommodated in four separate areas, the pair of pens in each half of the van being divided by a 'half dog-box' passenger compartment. In August 1911, the Clyde Engineering Company of Granville supplied a sixth box of this type, to complete the first group of BKG vehicles.

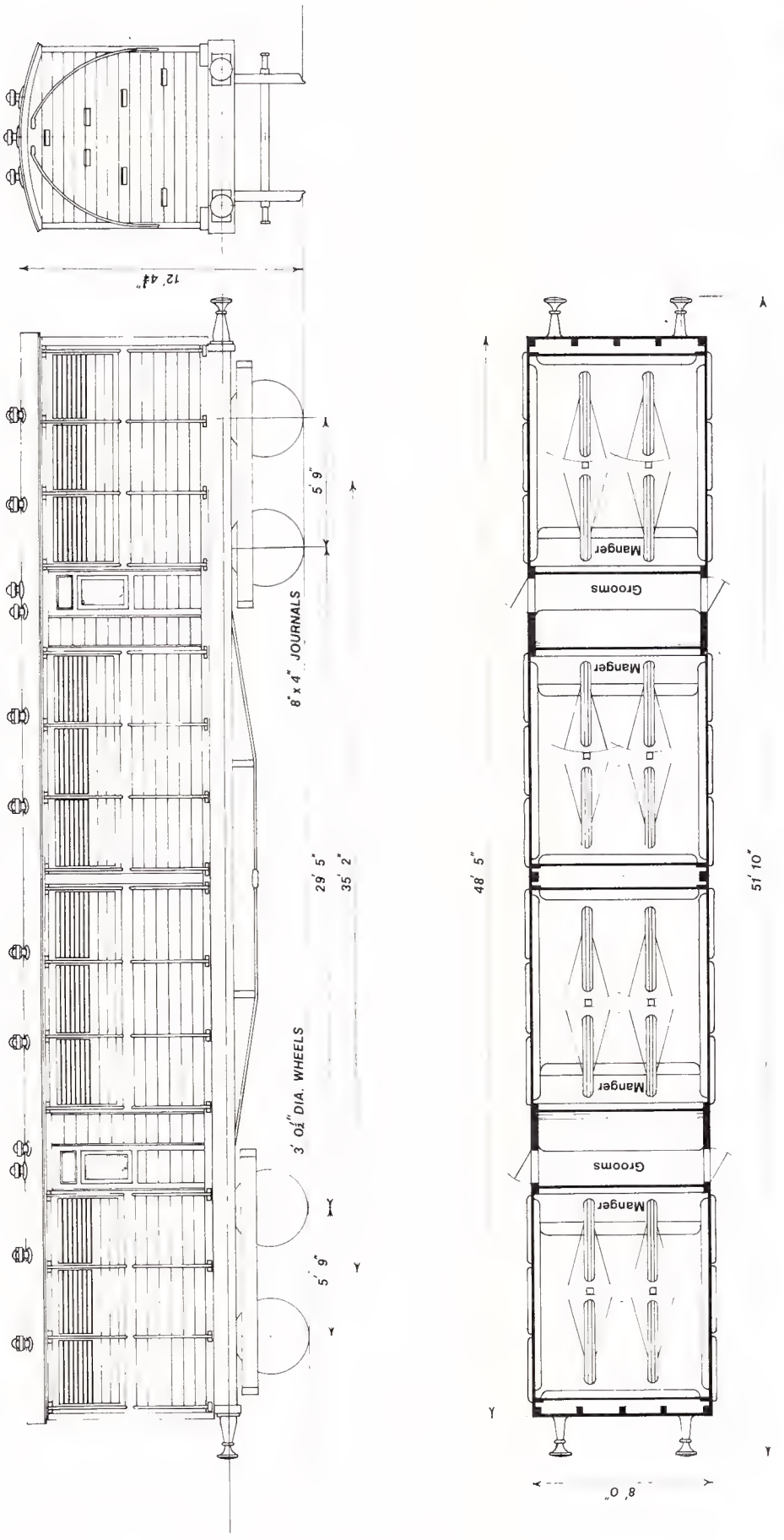
Running gear for these early cars consisted of the 2SB type 5' 9" wheelbase bogies. Later alterations to these vans included the fitting of eliptical roofs; and in the case of BKG.780, a steel underframe. This latter event occurred in 1971, only a few years prior to the vehicle's demise.

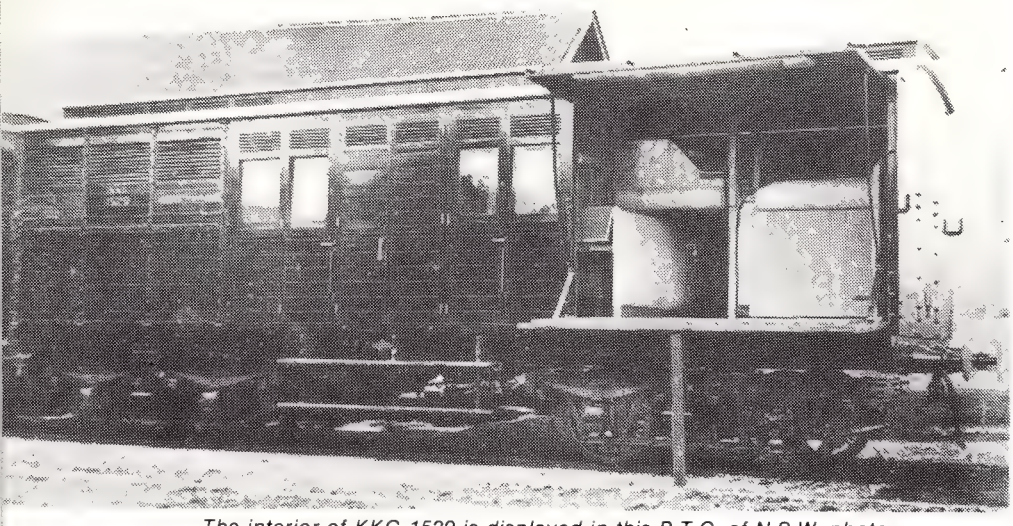
In 1921, 6 further BKG units were brought into existence. These cars, bearing road numbers 648, 659, 662, 670, 675 and 689, were fitted with steel underframes and conventional roofs. They rode on 7' 0" wheelbase trucks of the 2AD pattern. In 1942, the underframes from this second BKG group were used for the construction of FG type passenger cars.

The final batch of BKG cars appeared during 1946, with the underframes of 6 BKR type vehicles forming the basis of construction. They were fitted with elliptical

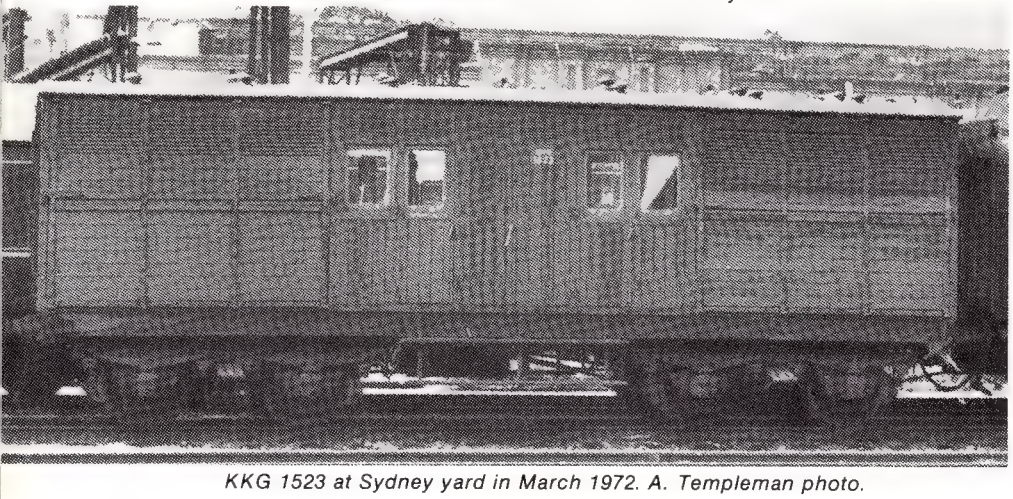
BKG 1522 with clerestory roof showing interior detail. N.S.W.P.T.C. photo.




N. S. W. G. R.
BOGIE HORSE BOX
CODE - B.K.G.
Nos.:- 686, 780, 865, 552.
Tare:- 21 tns. 0 cwt.
Capacity:- 12 Horses. 10 Grooms.
Drawn:- A. Compton
Date:- July '76
12' 4½"
8" x 4" JOURNALS
5' 9"
29' 5"
35' 2"
3' 0½" DIA. WHEELS
5' 9"
Manger
Grooms
Manger
Manger
Grooms
Manger
48' 5"
51' 10"
8' 0"
Scale
Feet
Inches
0
5
10
15
20
25
12



The interior of KKG 1529 is displayed in this P.T.C. of N.S.W. photo. Note that the vehicle still has the clerestory roof.



KKG 1523 at Sydney yard in March 1972. A. Templeman photo.

roofs, and rode on 7' 0" bogies also. Some of these steel underframed units had a short life as horse boxes, being condemned as early as the mid 1950s. Car 865, which lasted in operational condition until 1974, has been acquired by the Hunter Valley Steam Railway and Museum for preservation.

For traffic purposes, the BKG box was load rated at:

26 tons — when carrying 1 or 2 horses
27 tons — when carrying 3 or 4 horses
28 tons — when carrying 5 or 6 horses
29 tons — when carrying 7,8 or 9 horses
30 tons — when carrying 10, 11 or 12 horses

Drawgear capacity was set at 390 tons. The marshalling regulations for these vehicles will be covered in the general essay on horse box operations which will appear in a future edition of this magazine.

KKG type Vehicles

The second bogie horse box design appeared between 1911 and 1928, 56 vehicles of this class being produced to satisfy 4 orders. The initial batch, comprising cars 570, 640, 706, 759, 861, 862, 900, 926 and 1523 to 1534 inclusive, possessed timber underframes — the only KKG units so equipped. They had an average tare of 18 tons 16 cwt 1 qr; and rode on 2SB type 5' 9" wheelbase bogies. Clerestory roofs were fitted to these boxes.

The second contract, placed with Clyde Engineering, yielded cars 554, 556, 572, 677, 702 and 763 during 1913. These may have been the cars originally fitted with 6' 6" wheelbase bogies (possibly of the 2SE type), because the two later groups of KKG units would logically have been built with 7' 0" wheelbase running gear. The 1913 — built cars, therefore, would have tared around 18 tons 10 cwt. Again, clerestory roofs appear to have been original fittings.

TABLE 9 — BKG Horse Boxes

Year Built	Builder	Car Numbers
1894	Eveleigh Car W/S	528, 529.
1899	Eveleigh Car W/S	537.
1904	Eveleigh Car W/S	686.
1910	Eveleigh Car W/S	780.
1911	Clyde Engineering, Granville	1522
1921	Meadowbank M/fg, Rhodes	648, 659, 662, 670, 675, 689.
1946	Eveleigh Car W/S	544, 552, 608, 701, 739, 865. (built on reclaimed BKR underframes).

TABLE 11 — KKG Horse Boxes

Year Built	Builder	Car Numbers
1911	Clyde Engineering, Granville	759, 861, 862, 900, 926, 1523 — 1534
1912	Clyde Engineering, Granville	570, 640, 706
1913	Clyde Engineering, Granville	554, 556, 572, 677, 702, 763.
1915	Eveleigh Car W/S	531, 566, 571, 587, 595, 723, 746, 765, 793, 798, 808, 852.
1916	Eveleigh Car W/S	856, 873, 878, 917, 930, 933.
1927	Robert Kilborn, Regents Park	1790, 1791
1928	Robert Kilborn, Regents Park	1792 — 1801

TABLE 10 — SERVICE HISTORY: BKG Horse Boxes

Car No.	Period of Service
528	1894 — 1966
529	1894 — 1955
537	1899 — 1957
544	1946 — 1955
552	1946 — 1974
608	1946 — 1955
648	1921 — 1942
659	1921 — 1942
662	1921 — 1942
670	1921 — 1942
675	1921 — 1942
686	1904 — 1967
689	1921 — 1942
701	1946 — 1955
739	1946 — 1953
780	1910 — 1974
865	1946 — 1974
1522	1911 — 1966

TABLE 12 — SERVICE HISTORY: KKG Horse Boxes

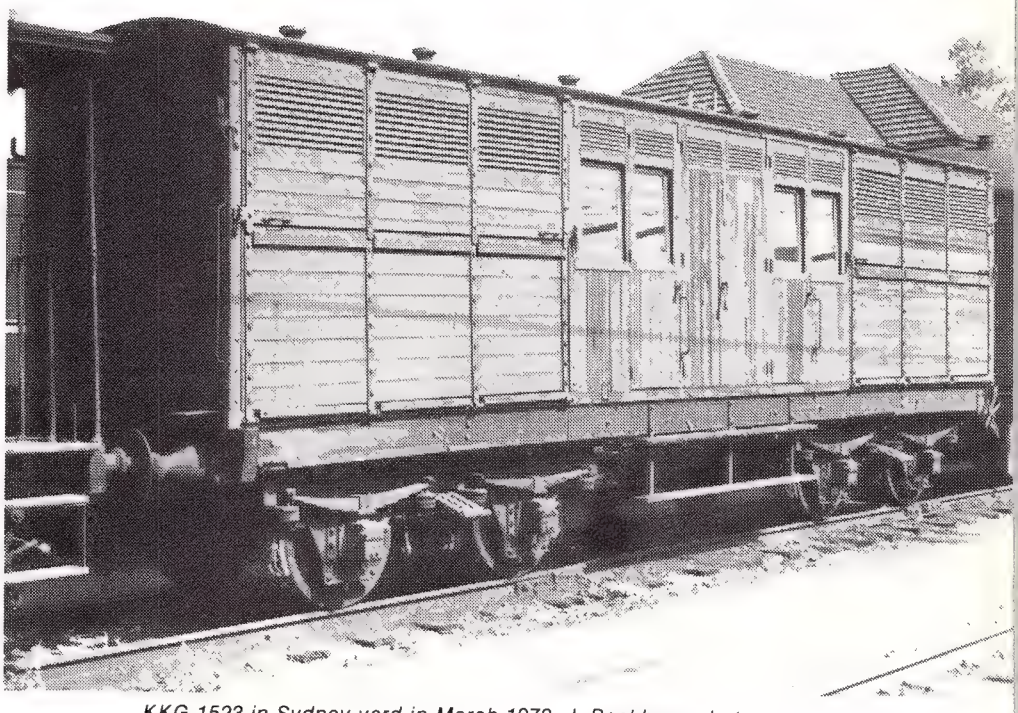
Car No.	Period of Service	Car No.	Period of Service
531	1915 — 1942	917	1916 — 1943
554	1913 — 1942	926	1911 — 1967
556	1913 — 1943	930	1916 — 1943
566	1915 — 1943	933	1916 — 1943
570	1912 — 1969	1523	1911 — 1974
571	1915 — 1943	1524	1911 — 1974
572	1913 — 1943	1525	1911 — 1969
587	1915 — 1943	1526	1911 — 1969
595	1915 — 1943	1527	1911 — 1968
640	1912 — 1966	1528	1911 — 1969
677	1913 — 1943	1529	1911 — 1974
702	1913 — 1942	1530	1911 — 1973
706	1912 — 1968	1531	1911 — 1967
723	1915 — 1943	1532	1911 — 1972
746	1915 — 1943	1533	1911 — 1967
759	1911 — 1969	1534	1911 — 1969
763	1913 — 1943	1790	1927 — 1943
765	1915 — 1943	1791	1927 — 1943
793	1915 — 1943	1792	1928 — 1943
798	1915 — 1942	1793	1928 — 1943
808	1915 — 1943	1794	1928 — 1943
852	1915 — 1943	1795	1928 — 1943
856	1916 — 1942	1796	1928 — 1943
861	1911 — 1971	1797	1928 — 1943
862	1911 — 1969	1798	1928 — 1943
873	1916 — 1943	1799	1928 — 1943
878	1916 — 1943	1800	1928 — 1943
900	1911 — c.1928	1801	1928 — 1943

The third series of KKG boxes originated from Eveleigh Carriage Workshops during 1915-16. They would have been fitted with 2AD type 7' 0" bogies, giving a tare of 19 tons 12 cwt 3 qr mean. These vehicles also would have been likely candidates for the fitting of clerestory roofs when new.

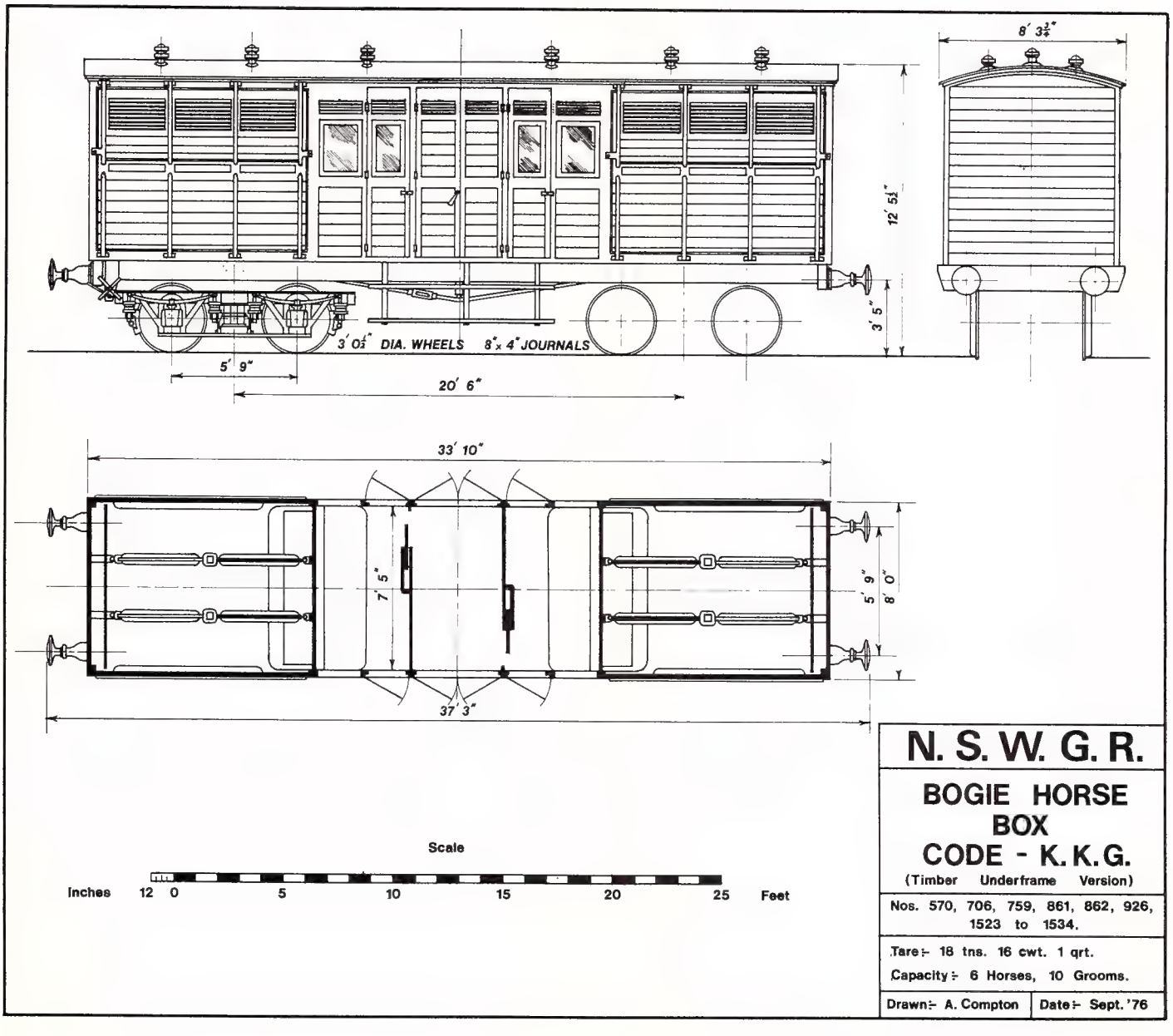
Carriage and wagon technology of the 1920s produced the characteristics of elliptical roofs and Laycock drawgear for the final batch of KKG boxes. Outshopped from Robert Kilborn Ltd. Regents Park, cars 1790 - 1801 tared 20 tons 6 cwt 3 qr on average; and rode on 2AD type 7' 0" bogies.

The 36 vehicles mounted on steel underframes were requisitioned for military duties during the Second World War, being converted to MCV type bogie box cars between November 1942 and November 1943 (see November/December 1978 A.M.R.M.); except for KKG.856, which was directly converted to accident van L.780. Aside from KKG.900, which appears to have been withdrawn as a result of accident damage, the timber underframed horse boxes of this design survived until the 1966 - 1974 era. Many readers will recall the lengthy row of these cars stored at Flemington during 1969. Despite the downturn in traffic requiring the use of horse boxes by the 1970s, car 1524 was fitted with a steel underframe and automatic couplers as late as October 1971! A suggestion that the body of 1532 was involved in this modification has been

Continued on page 31



KKG 1523 in Sydney yard in March 1972. J. Beckhaus photo.



901 works the Up Tailem Bend passenger past treeless hills near Callington in 1977. The flat wagon and insulated container of meat from the local Abattoirs was added to the train at Murray Bridge.

".....AND AFTER THE SAR CAME ANR"

In the first of this three part article (AMRM Nov/Dec. 1979) I detailed the effects of the transfer of the country sections of the SAR to the Australian National Railways Commission.

Commencing a review of what is available for modellers of the extinct South Australian Railways.

part 2 by Phil Curnow

So you want to model the SAR. Well now what can we suggest that will be of use to you. Many of the items on this list require kitbashing of ready made models. Some will be closer to the real thing than others and I'll leave the final choice of how far to go entirely up to you.

Locomotives

There are no brass engines currently available of SAR prototype. If you want to hack and slash and have a wallet thick enough to support your mistakes then good luck. The plastic loco field is a little more attractive.

930 class. (AMRM Nov/Dec 1977).The conversion from a Lima 44 class was included with the article. Since publication all piping shrike emblems have been removed and ANR is now being added in yellow paint on each side.

900 class. Arguably the best looking diesel in Australia and blessed with a distinctive exhaust note. An article is being prepared on these English Electrics and the only way to get an accurate model would be to scratch build a body. A reasonably close approximation is obtained by repainting an Athearn PA. To complicate things when the SAR chose to build the 900s it followed an Alco body style and then placed it on plain frame bogies similar to the GM style. Although it doesn't have the correct bogie wheelbase the best chassis to use would probably be an Atlas SD9 or similiar six wheel bogie diesel, Rivarossi make bogie side frames for their E9 which have the 900 look so it is merely a task of trying to get some as spares then attaching them to the bogie side frame. The Athearn is not so suitable because it has metal bogie side frames as part of its power pickup system.

800 class (AMRM Jan/Feb 1978). Ngaugers use a Fairbanks Morse diesel for this model but HO modellers will have to build a body onto a suitable chassis. The Athearn SW1500/S12 chassis runs well with flywheels but has the wrong side frames.

700 class. Article awaiting publication as part of NSW442 class project. The 700 is very similar to a 442 with just a few minor alterations in staff exchanger details etc. All we need now is a model of a 442 and we're in business.

600 class. This is almost identical to the NSW45 class. (AMRM April/May 1963). After 1975 the short hood has been louvred to improve dynamic brake cooling so the Friedmont kit could be bashed into a reasonable model. This class is used only on the standard gauge and totals seven engines numbered 600 to 606. They were delivered (1965-1970) in a paint scheme of rich red and silver (930 etc. are a maroon colour by comparison) but in recent years have been repainted mustard pot colours similar to the 830 class.

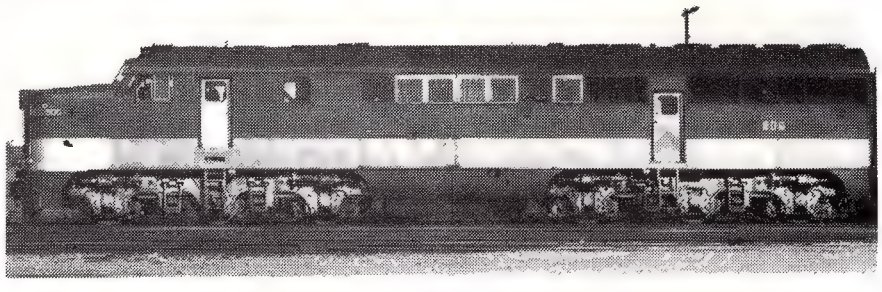
830 class. Take one Berg's model 48 class, remove buffing plate, alter the multiple unit stand, fill in the staff exchange box, paint mustard pot colours and number to suit. Voila! one model you'll be pleased to work with as their gearing was well chosen for smooth, slow speeds. (AMRM Jan/Feb. 1980)

500 and 350 class shunters. I know of no quick conversions for these so you're on your own. 351 has been withdrawn pending sale.

600 class 4-6-2. (AMRM Jan/Feb 1979). Unfortunately the whole class was scrapped before one could be obtained for preservation. The Mehanotechnica USRA pacific at a price of about $25 is a good starting point as it has fine flanges and a wheel base almost exactly that of the 600. The body presents a challenge as it is much heavier looking than the USRA style. Perhaps a Rivarossi boiler could be used.

620 class 4-6-2. (article nearly completed). Engine 621 is well known as an ARHS tours engine. A close to accurate model of a 620 will probably require a complete scratchbuild job. The Rivarossi pacific is far too large and heavy to be used as a basis for a 'light pacific'.

720 class 2-8-4. (AMRM July/Aug 1976). Bob Burton used a Lima chassis for the conversion detailed in that article.



The side view shows the similarity to the Alco PA type. Photo by Roger Billett.

Unfortunately the mechanism doesn't seem to like slow speeds suitable for booster equipped operation. He has since fitted a new worm and can motor with fantastic results.

500 class 4-8-2/4-8-4, 520 class 4-8-4. 700, 710 and 740 class 2-8-2. These eight driving wheeled engines probably typify the best known SAR steam power. Obtaining a suitable mechanism presents a few problems. The Bachmann 2-8-0 looks about right but a lot of work is required to make it shunt smoothly without excessive wobble. The drivers are screwed onto the axles and very easily get out of square. Barry Dunstan has built some excellent 700 class using a Tyco chassis and scratch built body. He won a Master Modeller Award several years ago at the SARMA annual modelling contest. Later he built a 520 body to suit a brass chassis and the model is truly outstanding. The inspiration for the 520's body shape came from the Pennsylvania T1 duplex drive streamliner with local variations to suit a smaller wheelbase. The 520 shape varied for the 520 to 522 group but 523 to 532 were almost identical and the changes to the front end certainly made this latter group look graceful at speed rather than brutish. Class leader 520 has been restored to active service on the ARHS Steamranger tours. 523 is one of the larger exhibits at the Mile End railway Museum along with 504, 624 and 702.

750 class 2-8-2. The Victorians regarded these as heavy power when used as N class however to the SAR they were lightweights and spent their time out on the Mallee lines and on lighter trafficed branches. Probably the best idea is to wait for the Vics to produce a model of the N class then rip the buffers off it, throw away the number plates and paint it 752 etc.

Rx class 4-6-0. (AMRM Jan/Feb 1969). These are probably the most familiar SAR steamers because the design dates back to the R class of 1886. They have worked on all the broad gauge lines and worked most trains with the exception of the airconditioned Overland. Barry Dunstan carefully cut a brass engine to make into an Rx and as you'd expect by now the result is really good. I don't know of any quick conversion that gives the gap between the second and third driving wheel although some of the cast metal locomotive kits from the USA could be worth investigating. Two Rx have been retained for SteamRanger although only Rx224 with the copper capped funnel is operating Superheated Rx207 is waiting for some difficult boiler repairs. Rx93 is in the Railway Museum and others adorn parks at Victor Harbour, Kapunda, Nuriootpa etc. Refer ARHS Bulletin of Sep. 1975 and Oct. 1975 for detailed history.

P class 2-4-0T. Electrotren made a tank engine that could be quickly bashed into a near thing for a P but the model appears to have become unavailable.

S class 4-4-0, F class 4-6-2T. The S had the largest driving wheels in Australia and shows the British influence on SAR before Commissioner Webb arrived with the 500s etc. The F was the main suburban tank and while the valve gear on these and the Rx was simple they will need to be scratchbuilt.

Narrow gauge T class 4-8-0. An article is in preparation for this engine. The Pichi Richi Railway Preservation Society took over the option on T186 from the ARHS after the engine was withdrawn and has returned the engine to service at Quorn. Another of the class, T251 has operated on the Belmont Common line at Geelong while others are preserved at Peterborough, Millicent and the Railway Museum. They have also worked on the TGR and a few were converted to broad gauge by the SAR.

Y class 2-6-0. This was SAR's version of Beyer Peacock's standard design for narrow gauge and is similar to the WAGR G class featured in AMRM Jan/Feb. 1976 although SAR did not have the 4-6-0 version. Y97 lasted to the end of narrow gauge steam and worked as 'Roundhouse Rat' at Peterborough and was a popular tours engine when painted in black or green livery. It is preserved at the Railway Museum and is featured in many books including 'Proceed to Peterborough' by the ARHS. The Silverton Tramway had a Y class which had the older sloping front to the smokebox. The SAR rebuilt some engines with Belpaire boilers and classed them as Yx and one is preserved in Port Lincoln.

Wx class 2-6-0. This is the rebuilt version of the W class and is similar to the NFa class in AMRM June/July 1975. It is smaller than the Y class and had a four wheeled tender. When Y97 was the 'Rat' it hauled a W class tender instead of its own six wheeler because the shorter length allowed the Y to ride the turntable with a T class. A Wx is preserved at Naracoorte with a V class 0-4-4 in a local park to commemorate the work of the narrow gauge in the district. The old Kingston line was built to pioneer standards and was so lightly constructed that only a Wx was light enough to work over it. This guaranteed the survival of the Wx until the line was converted to broad gauge. The ARHS book 'One Rusty Rail' by AMRM contributor Ron Stewien is a gold mine of info for people interested in these small engines.

Z class 4-4-0. These hauled passenger trains on the narrow gauge from Peterborough to Broken Hill. An article on the class is almost ready for publication. None have been preserved.

400 and 300 class Garratts. The 300 was SAR's class of the much maligned Australian Standard Garratt and was as successful as most of the others. Only the Emu Bay and Fyansford Cement managements appeared happy with their ASGs and the Fyansford engine is preserved at the Melbourne Railway Museum. Another modelling magazine (the AMRA Journal) has printed a plan of this engine. Two 400s remain being 402 at Zig Zag and 409 at the Railway Museum at Mile End. Strange as it may sound the Peterborough crews preferred the Beyer Peacock designed garratts to their new Alco diesels.

General notes. The arrival of Roundhouse's HON3 2-8-0 may prove a godsend to modellers of slim lines as Queensland appears to be the only State to actively push narrow gauge on TT track. From reports in various US magazines this 2-8-0 can be made to work more reliably than many brass locos. The boost in interest in HON3 in the USA should have some spin-off for local modellers as more parts become available at more attractive prices. Certainly the price of the 2-8-0 should make attacking it with a saw appear less risky. A feature of steam working in other states that was lacking from SAR operation was double heading on the broadgauge. Generally the practice ceased with the arrival of Webb's engines. The occasional engine failure or broken whistle caused two up front but it remained rare except for Oakbank Race trains which were shunted in Adelaide yard by twin F class. On the narrow gauge it was fairly common to the end of steam. The ARHS has not been permitted to double large power through tunnels and only in the last few years have double Rx become relatively frequent.

Railcars

Not much luck here. Best chance of making a Blue Bird would be to add driving compartments to a Lima IP car or perhaps to remove the roof blister from Athearn's Budd car. The suburban 300 and 400 class Redhens and the Brill 75 class oldtimers are all yours. You could use an F7 diesel for the power bogie as the wheel base is about right. If you work from photos remember that there were several types of 75s. Some had small windows while the 'milk bar' cars had larger windows and different seating arrangement. Some cars had a roof mounted radiator and there were several front radiator designs. One car remains at the Mile End Museum. The 75 and the lighter 55 class railcars were stock standard Brill types. For several years Hallmark Models have listed the 55 among their future products so perhaps there is hope for us yet. SAR used the small Brills on country branches out of Tailem Bend but their lack of power was a problem. They

The modifications to the short nose of the 600 class can be seen in this photo by Roger Billett. The larger area of louvres and the altered roof line are to improve the cooling of the dynamic brake equipment. The cab was also soundproofed.

returned to Adelaide where they were to spend most of their life working the Glanville to Semaphore line.

Coaches

While you could scratch build **Centenary coaches** (named because they were rebuilt for the State Centenary in 1936) most SAR modellers appear satisfied to convert Roundhouse's 50ft. Pullman cars as in AMRM Jan/Feb. 1975. The variation in the number of windows is barely noticeable (they had either 16 or 17 windows depending on origin) so to get the SAR look you need only remove the oval emblem from each side and rebuild the strapping in that area then alter the roof line over each platform. These Roundhouse cars can also be used for other conversions. Fitting extra doorways makes them into suburban centreloaders which were painted brown. Both the suburban and Centenaries had baggage cars in the usual consist and these have the central windows on each side filled in and a wide sliding door fitted. After their withdrawal from service some cars were converted into workers cars and painted orange which has since been changed to white with green trim. An interesting modification has been to remove half the body of a centre loader and fit a collapsible water tank in its place. A number of Centenaries and suburban cars have been retained for SteamRanger tours.

Joint Stock E series cars. (AMRM Feb/March 1976). Because of their wooden construction they are no longer permitted into SA on the Overland unless a strike in Melbourne prevents the normal cars from being used in which case a speed restriction applies. Most of the AE and BE cars and sleepers such as Dargo and Tambo have been withdrawn with some being sold as holiday shacks etc. In the 1950s SAR purchased two sleepers, reclad their sides with steel below the windows and ran them on the overnight Mount Gambier trains. Unfortunately these cars were also withdrawn as part of the wooden cars policy and 'Angas' and 'Finniss' are now in the SteamRanger grouping of carriages.

Air conditioned cars. Lima's Indian Pacific cars make a good starting point for these but avoid the Aurora car with its round door windows. The roof is smooth not ribbed as on the model and is painted black. The sides are stainless steel and maroon. AD and BD coaches and matching CD brakevans are now used on most country trains not worked by railcars. Modify the bogies as recommended in the AMRM Nov/Dec 1978 issue to improve the looks of the car. Tenshodo, Roco and Kadee wheelsets will improve the rolling qualities.

'Adelaide' Dining Car. This car was a standard Pullman Dining Car and was imported by Commissioner Webb in 1928 to help improve the standard of accommodation on the Overland to and from Melbourne. The Depression cut short its life on the Overland and it was rarely used afterward so, unlike similar vehicles on the VR it has not been converted to gas fires but retains its original cooking equipment and decor. In recent years its popularity has boomed for tourist groups, wedding parties and small convention groups as it takes 48 persons per sitting. The consist on this type of train is usually 830 diesel — Adelaide — steel coach (for toilet facilities) — brakevan. An article on converting a Rivarossi Diner into a close model of the Adelaide was in the May/June 1969 AMRM.

This suburban baggage car is another possible conversion from the Roundhouse model of a 50ft. Pullman car. Photo by David Flanagan.,

Steel bodied cars of the 500, 600 and 700 types. These non air-conditioned cars date from the 1930s. Some modellers use Roundhouse Harriman cars for these but they appear too wide and the roof too arched to be a satisfactory alternative to scratchbuilding. Originally these cars were Hawthorn green and cream but in the late 1960s were painted maroon and silver to match AD type cars and more recently some are all maroon.

Brakevans

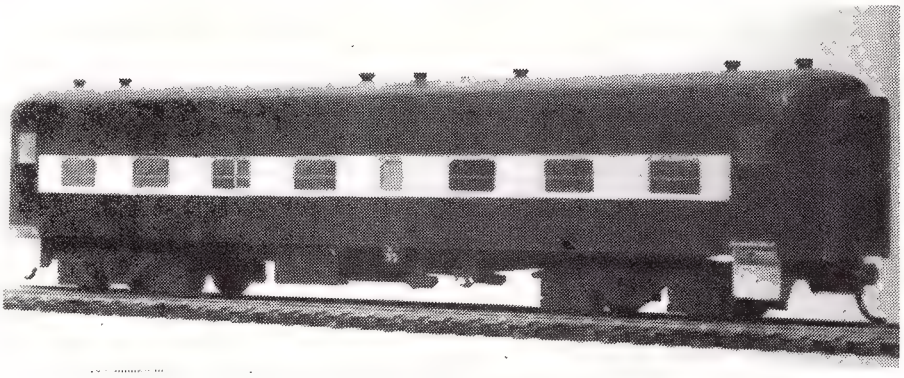
Commissioner Webb brought an obvious American look to the SAR with his steam engines and rollingstock and wanted to introduce the relay style of working for guards which is a feature of American railroading. He introduced caboose type brakevans which have a body style very close to the Ambroid kit of an old dynamometer car. The Webb brakevans (cabeese?) were withdrawn in the early 1960s and converted to workers cars. Two remain in the Railway Museum.

The pre Webb bogie brakes were a group typified by number 4074 which is now part of the SteamRanger grouping. A special agreement with the Unions allows this van to remain in tour service whilst not fitted with a toilet. A plan and detailed article on 4074 is in this issue. The narrow gauge had several types of similar vans and a plan and photo of one is in the July/August 1968 issue of AMRM. Unlike the broadgauge there are still a large number in service on the Port Lincoln, Wilmington and Quorn lines as well as the preservation groups at Pichi Richi, Lithgow, Zig Zag and Geelong.

When Lima released their 8300 class brakevan the SAR modeller had his first 'shake the box' vehicle which was a good resemblance to the original. An article is scheduled for publication soon on the various series of 8300 brakes, CGP passenger brake and comparable vans operated by the WAGR and the VR. The standard gauge 8300 have worked regularly into NSW on Interstate goods trains. This can be a reasonably difficult model to scratch build if you wish to have the several levels of metal around the doors. BJ models have produced this as an all wood kit using millimetre ply for the sides.

Prior to the steel bodied 8300 the SAR used wooden bodied vans which had a cupola on the roof above the guard's compartment. The 4400 class (AMRM Sep/Oct. 1968) was the last to be built and were the only ones to be equipped with toilets which eventually meant they outlived the other wooden bodied types after the Unions complained about the lack of basic requirements. Another distinctive feature is that they rode on Bettendorf type goods bogies. Only one remains in original condition being 4417 which is used as a stores van by the SteamRanger workforce. The others have all been withdrawn and either scrapped or converted into workers cars. If you decide to model this type of brakevan look carefully at the photo accompanying the plan for panelling and other detail not included in the plan.

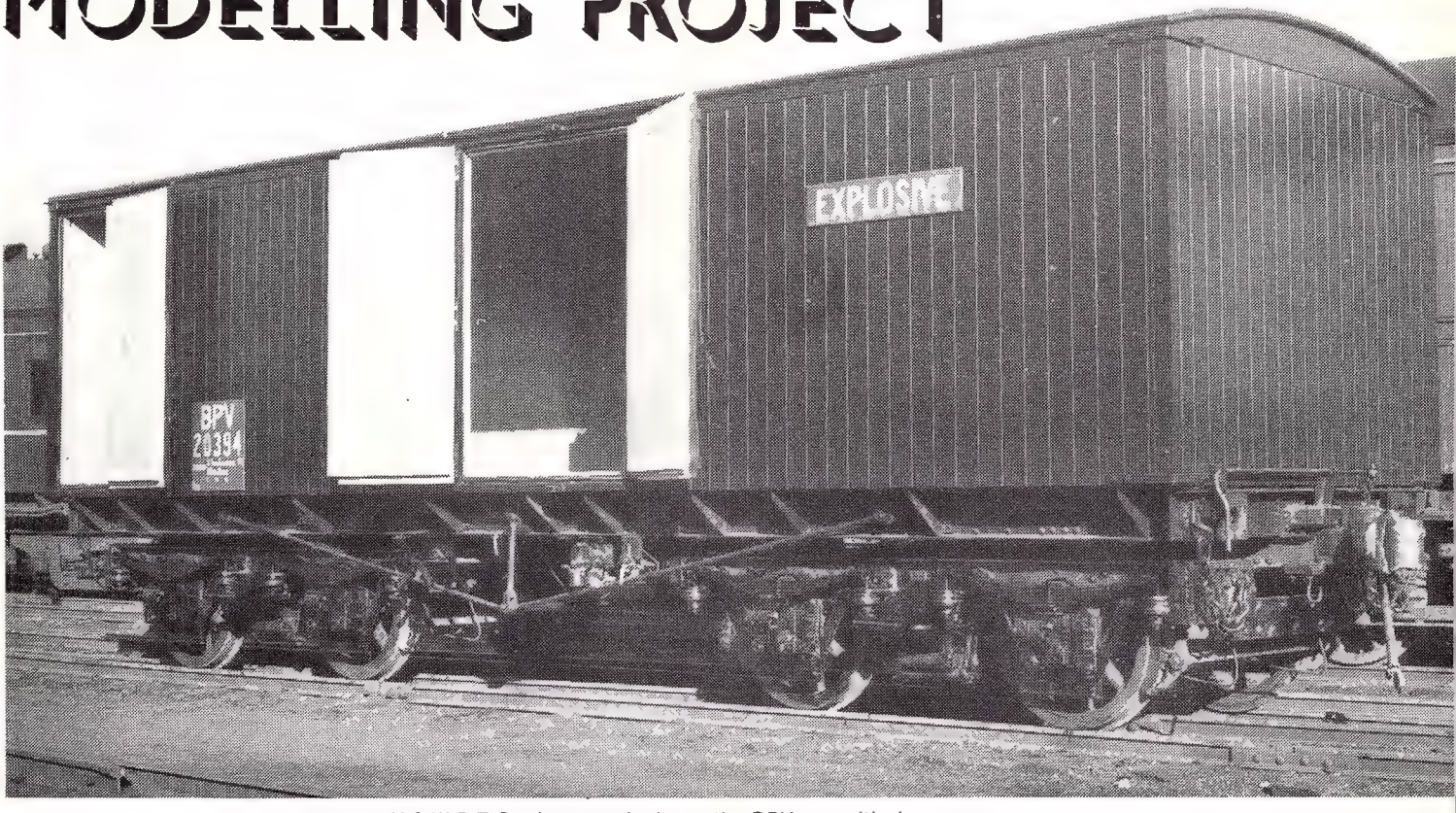
Since this article was written the scene is changing further. 858 and a n.g. 830 are to be sent to Tasmania with NSU class working the Quorn and Wilmington lines. Brakevan 8356 has been painted white with blue ANR emblem. The change over to ANR red rollingstock colour is progressing rapidly but there are numerous variations in colour and location of emblems and numbers. The broad gauge 700 class are receiving maroon rooves. Standard gauge engines are being painted a variety of designs using ANR engine red and silver. Following successful tests the through running of VR C & S classes is expected to commence soon.



Paul Brooks built this model of a 780 class carriage using styrene sides and wooden roof. Photo by Ray Zeffert.

In the concluding part of this series I'll review the possibilities of SAR goods rollingstock and scenic effects.

MODELLING PROJECT



N.S.W.P.T.C. photograph shows the BPV van with doors open.

BUILD A BPV

by Roger Johnson

In recent issues of this magazine, a number of requests have been received for articles written purely for the beginner. Personally, I feel that anyone comtemplating the construction of rolling stock has progressed beyond the outlook of a beginner. However, for that person, now moving beyond his previously limited capabilities, this article is written. A listing of the common names used in construction articles is included.

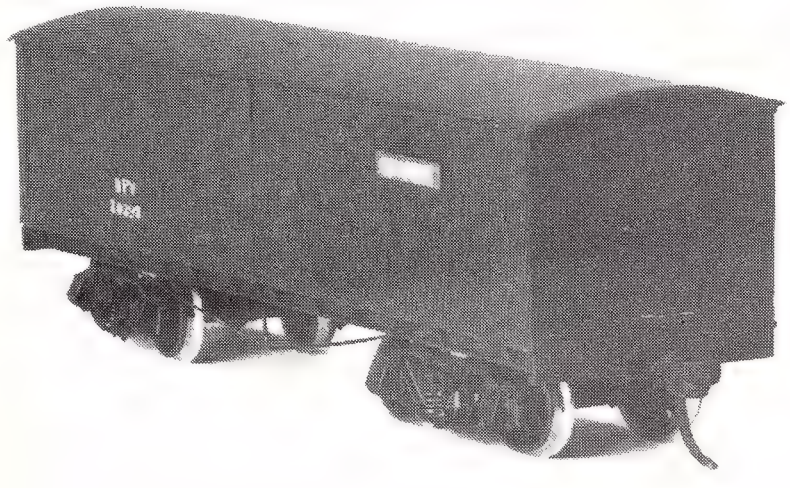
The object of this article is to construct a NSWGR BPV bogie explosives van. The reasons this vehicle was chosen are:-

1. It is a "square box",
2. It is fully enclosed — no internal detailing required,
3. The sides are smooth T & G boarding,
4. The roof is smooth and has a simple curve,
5. The doors are hinged — no hardships making rollers and tracks, and
6. Detailing amounts to hinges, locking bars, truss rods and body tie down brackets.

There are no new ideas in this article regarding the methods of construction. All methods have been tried and tested and some have been previously described in other issues of this magazine.

Preface

Typically, when you've finished your model and are satisfied with the end result, along comes all the information you needed before beginning. So it happened in this case. Keen eyed readers will notice the discrepancies. Please note:- the article has been amended where necessary to be consistant with the photographs and information received just prior to the final draft.



Materials

1/8"	Plastruct Channel code C-3
3/32"	Plastruct Channel code C-4
1	sheet 0.030" Styrene
1	sheet 0.005" Styrene (if not available, substitute 0.010")
1	pair own choice couplers (Kadee MKD 5's used in article)
1	pair bogies (Kadee sprung Andrews used in article)
12"	28swg wire
2	fluid ozs MEK (Methyl Ethyl Ketone — styrene solvent)
1"	square 0.005" shim brass
3ozs	1/16" lead sheet
1	brake cylinder casting (incorporating a Triple valve)
1/16"	Plastruct Angle code A-1
	Protype Explosives decal
Floquil	paints — weathered black
	weathered set matt red

Tools

Good quality artist's brush size 1.
Pair side cutters
Drill vice No. 79 drill
Light soldering iron
Flat file — 4" Smooth or Swiss
HO scale rule — MOST ESSENTIAL
Tube of Superglue (alternatively — 5 minute epoxy)
Tube of Tarzan's Grip
Exacto knife and razor saw
Pair small straight scissors
Scriber (or 'doctored' dentist's probe — refer AMRM Issue 73, Jul/Aug. 75, Pg. 27)
Square (although 3" square is designed for modelling, due to cost make do with carpenter's square or reasonably priced combination set)

Important:- At all times, refer to the plan for sizes and location of items. Use HO rule or scale from the plan utilizing the scale on the drawing. Unless otherwise instructed, all edges are to filed straight and all corners are to be square. Practice this on some scrap.

Body Cut a floor from 0.030" styrene. This will be equal to the van's outer dimensions. Cut two pieces of C-3 channel equal to the van's width. Using MEK, glue these to the floor, laterally, with the web facing inwards to form the buffer beams. See Diagram 3.

Note:- *Use an artist's brush for MEK. Dip the brush, touch the tip momentarily against the inside of the neck of the jar and then touch the tip to the joint. Capillary action will draw the MEK along the joint. The better fitting the joint faces, the better the MEK will travel. Allow the joint to "weld" before attempting to move the job. Where possible, allow 24 hours or more for the joint to cure, particularily for joint subject to stress. Try a few joints with scrap.*

Cut two pieces of C-4 channel equal to the van's length. These are to represent the solebars. Before these can be attached the ends must be filed or cut to fit into the buffer beam channels. Remove the solebar's flanges equal to the depth of the buffer beam flange. See Diagram 3. Position solebars as per Diagram 4 and glue. Set aside to dry.

Note:- Trial fit the solebar before gluing. If the flanges are not cut back enough, the solebar will bow. If a little nervous, use a steel rule and a soft pencil to mark the position. Use this mark as a guide.

While the 0.030" styrene is still in a large sheet mark out the body sides and ends. Utilize an edge as a base but check that it is straight. Use the edge to guide the square when scribing the board joints, etc.

Note:- As can be seen on the plan, some areas of the sides and ends are not scribed with board joints, door surrounds, end top section, etc. Check the plan before starting. When the two sides are marked out, the doors will be at OPPOSITE ends to allow the doors to coincide when ASSEMBLED.

Warning:- Disregard the location of the double door on the plan. Locate the centre of the door at a position halfway between the single door and the opposite end. See Diagram 5.

Scribe the board joints 2mm apart; slight variations in width do not matter. Now scribe the wood grain using a scriber or probe. The grain will nominally run along the length of the board. However, due to the growth or species of tree, the grain may be wavy. For extra detail, scribe in the odd "knot" and swirl the grain around it. When finished, trim off the raised edges by lightly scraping the blade of a knife along the grain.

Note:- Having completed the hardest task of all the construction, be extra careful from now on. One of the easiest mistakes to make during the following operations is to apply too much MEK from an over loaded brush too close to your fingers. The resulting fingerprint cannot be removed.

Cut out the sides and ends. Leave a little all around and then file down to size. Chamfer, at 45°, each edge that forms a joint (including the floor). The chamfer angle does not have to be exact providing the joint of the outer faces matches along its length. See Diagram 6.

Glue one side to the floor. Use the square to ensure that it is standing at right angles to the floor. If a bow has worked into the side, commence gluing at one end. Allow the first ¼" to set, then fix the remainder of the joint.

TERMINOLOGY

Longitudinal and Lateral The direction in which a part is set relative to a defined position; eg; from a bird's eye view of a wagon resting on a straight piece of track, the rails would be set longitudinally to the van's centreline and the sleepers set laterally.

Bogie The pivotted truck at one end of a wagon or carriage. It consists of a number of wheels, mounted on axles, contained within a framework of steel (wood in older wagons). The bogie is usually a two axle type but may consist of more.

Underframe The framework of the vehicle, below the floor, constructed of wood, steel or a composite of both. The perimeter frame consists of lateral members at the ends (called buffer beams or headstocks) and longitudinal members (called solebars) at the sides. Along the longitudinal centreline is located a central "spine". In older vehicles, this is comprised of two steel channel sections, set 12" apart, rivetted, or welded, to the buffer beams. In modern vehicles, the spine is fabricated from steel plate with strengthening flanges welded in place. The modern practice is to weld as rivets are now regarded as obsolete. Emanating at each junction of the buffer beam and solebar, and fixed at the opposite end to the central spine, is a steel channel. These are designed to absorb shocks created when two vehicles bumped together. These members are present in all vehicles designed during the era of the buffer, regardless of whether or not buffers are fitted. Various other lateral members, usually angle section, are fitted along the length of the underframe. Refer Diagram 1 and back copies of AMRM for drawings of various underframes.

Bolster A massive lateral member of the underframe to which the bogie pin is attached.

Truss Rod Metal rods or square bars which run longitudinally below, but attached at their extremities to, the underframe. They can be tensioned (stretched) by either rotating a turnbuckle or lengthening a post to prevent the vehicle from sagging in the middle when laden. Depending on the laden weight of the vehicle, there may be two to four truss rods, each attached to a longitudinal member.

Post A distance piece to hold the truss rod away from the underframe. There are two main types; a rod, with a fork end fitting, used in conjunction with a turnbuckle, and a rod with a screwed end fitting. Along the length of a short underframe, there is only one post (called a King Post). On a long frame, there are two posts (called Queen Posts).

Body The structure of the vehicle above the underframe. The body is attached to the underframe by bolting to body tie down brackets.

T & G An abbreviation for Tongue and Grooved. These are boards which are cut with a slot (groove) on one edge and a matching extension (tongue) on the other. The boards are used extensively as housing floor boards. In railway usage, the boards are normally set on end for use as exterior sheeting and, consequently, the board joint is run vertically (there are exceptions) to prevent water collecting in the groove decreasing the possibility of rotting.

Door Rollers & Tracks The equipment which allows the doors to roll back and forth.

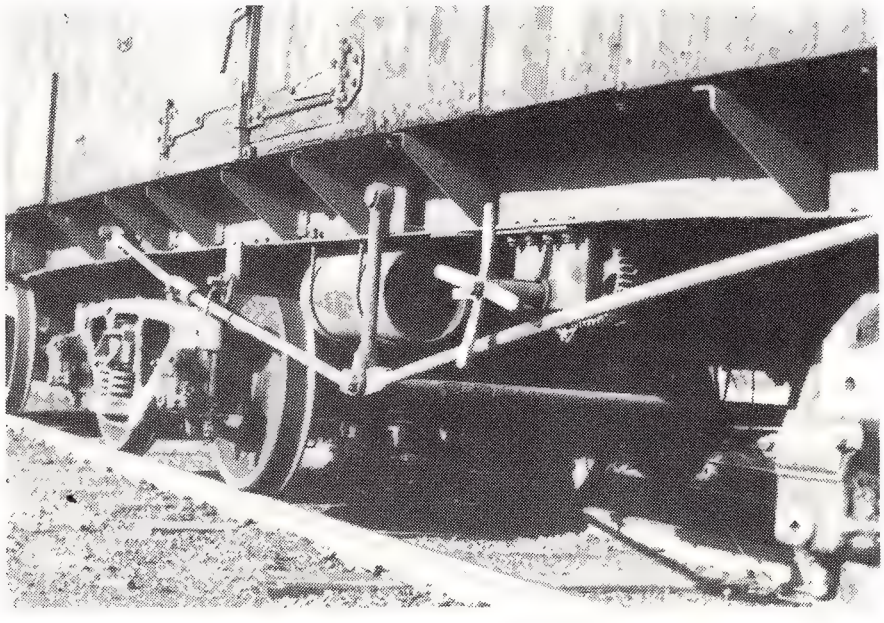
Locking Bars A series of rods and levers which restrain the door in the closed position. There are also small brackets, attached to the vehicle's side, which are used to secure the door in the open position.

Bulkhead An internal strengthening wall, usually set laterally.

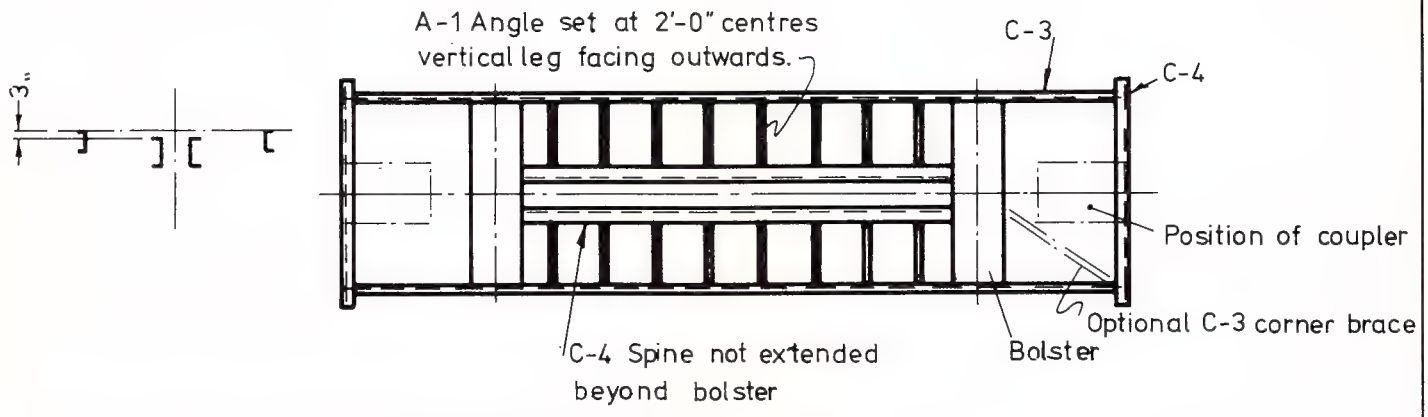
SWG (Imperial) Standard Wire Gauge. A measurement of thickness of wire and thin sheet metal. Although now superceded by metric systems, SWG measurements are generally retained by modellers.

Examples:- 10SWG = 0.128", 16SWG = 0.060", 22SWG = 0.028"

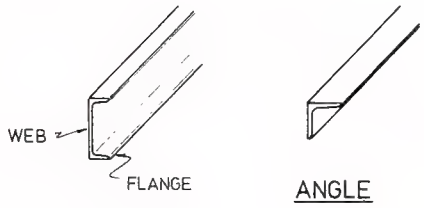
Steel Section Terminology There are many different shapes of steel sections. This article is concerned with only two, the channel and the angle. The channel consists of a web and flanges. The angle, unless of the unequal type, consists of two equal legs. See Diagram 2.



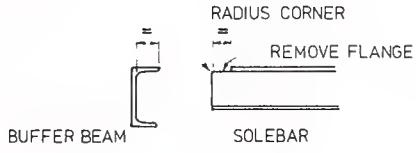
The underframe view of BPV 20403 shows the metal gussetts that support the timber body. Bob Gallagher photo.



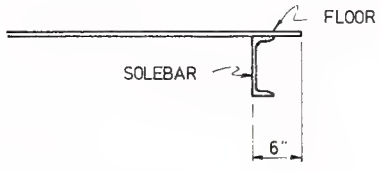
① Standard underframe modified to suit BPV model.



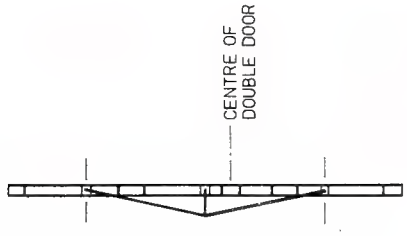
②



③



④



SOLEBAR DETAILS

⑤

Hold the joints together to allow the styrene to weld and set. Attach one end. Again use the square to ensure squareness to the floor and the initial side. Complete the gluing of the sides and ends. Set aside to dry.

Cut out, of 0.030" styrene, 4 bulkheads. The simple type is a rectangle equal to the internal height of the side by the internal width. The better bulkhead type is one where the roofing support is included. Make as before except that, instead of cutting to the height of the side, use an end as a template to scribe the roof line curvature. Space these equally along the length of the van and glue into place. Again use the square. Set aside for minimum of 24 hours to dry.

At this point of construction, weight *must* be added to ensure good running qualities and to prevent jack-knifing when shunting. The RP20 Data Sheet recommends 3ozs for this vehicle. Using a pair of 8" scissors (not the wife's dressmaking scissors either), cut the lead sheet to fit inside the van. Fix it between the bogie centres, using Superglue.

Roof Before fitting the roof, the roof tie down timbers fitted to the end's curved section must be attached. These are represented by two pieces of 0.030" styrene ⅛" wide by 2" long. Before fixing into place, ease in the approximate curve using the method shown in Diagram 7. When gluing, start from one side and attach about ⅛" of the strip. Leave this for 24 hours before attempting any more. Of course, both ends may be worked on concurrently. The reason for setting aside is to enable the joint to better resist the tendancy of the strip to straighten out. See Diagram 8.

Note:- As the joint progresses, clamp the strip with wooden (not plastic) pegs. It never pays to hurry this. Do a little at a time and set aside to dry. One of the best times to do this task is when there is a good movie or programme on the "moronoscope". Do the gluing during the ads.

Now to fit the roof proper. There are several methods of doing this but I will describe the method I prefer. The written text makes the task sound impossible. However it is quite easy and resembles pastry rolling.

Find a flat surface. This can be a new piece of thick chipboard or, if a piece is handy, a small piece of glass. Cut a piece of 0.005" styrene 5" x 2". Place this on the flat surface. Position the van UPSIDE DOWN in the middle of the styrene. ROLL the van until the top edge of the side comes in contact with the styrene. Support the van in this position.

Note:- A matchbox is handy for this kind of work. Position the box with the striker face down. When the van is supported, balance a weight over the section in contact with the matchbox. The rough texture of the striker face prevents both the box and the van from slipping.

Apply MEK along the joint and leave to dry for 24 hours. To fix the remainder of the roof, simply roll the van until the top edge of the other side is in contact with the styrene sheet. Roll the van slowly gluing the end pieces as it moves over. Do *not* apply glue to the internal curved bulkheads, if fitted. Glue along the top edge of the side, support the van and set aside to dry.

The reason I use 0.005" styrene (which, incidently, I got from a shirt box) is that it is easier to form the roof. It does tend to look more realistic along the edges, but that is secondary. The other methods of roof making are:-

Method 1: Use Northeastern wood shapes. Select the closest shape, cut to the internal length and glue in place using 5 minute epoxy. When dry, paint on a wood filler or undercoat and sandpaper smooth working down to the finer grades of paper.

Method 2: Use thicker styrene (usually 0.010"). Find a tin can of approximately the correct diameter. Select a can of smaller rather than larger diameter. Tape the styrene to the outside of the can. The styrene will resist bending and until the tape gets a grip, this can be a frustrating operation with the thicker sheets (above 0.015"). Soak in hot water for 5 minutes. Release the tape and you will find that the sheet holds the bend reasonably well. There will be some spring back which is the reason the smaller can is selected. Position the van in the centre and glue.

Having fitted the roof, trim off the sides leaving an overhang of 1/16". Use nail scissors to do this. If necessary, draw a pencil line as a guide. File the ends leaving

approximately the same overhang. Remember to make them parallel to the body, with square corners. Round off the under edge of the 0.030" strip on the van's ends. See Diagram 9. You have now completed the basic body.

Detail There are some essential details to be fitted to the van. Thereafter, only enthusiasm will limit you.

Door Hinges. These are made from the 0.005" shim brass. Cut these, using nail scissors, to the size detailed in Diagram 10. 18 hinges are required.

Door Locking Bars. These are made from very thin strips of 0.005" styrene. The layout of the bars is detailed in Diagram 11. Locate them as per the plan.

Corner Straps. These are also thin strips of 0.005" styrene. Position as per the plan.

Explosives Panel. Again from 0.005" styrene. Size and location from plan.

Body Tie Down Brackets. Also from 0.005" styrene. Details on construction are given in Diagram 12. Locate as per Diagram 5.

Truss Rods and King Posts. These are made from 28swg wire. The joints have to be soldered. If you have not used a soldering iron before, get yourself some scrap wire or a few pieces of tin can and practice.

Note:- Rules for Soldering.

1. *Clean the joints. Use an ink rubber to scour the area.*
2. *Heat the soldering iron tip. Clean on a damp sponge or rag and touch with solder (called tinning). Wipe again on the damp rag.*
3. *Apply flux to the joint. This is not necessary if using cored solder. Do NOT use flux on electrical connections.*
4. *Put joints together. Touch BOTH pieces with the iron. Allow to heat. Touch solder to the joint a few millimetres away from the tip. When it melts, the solder will flow towards the tip.*
5. *Move the tip along the joint. The flow of solder will show how fast to go. Do not overload the joint with solder. It is a waste of solder and leaves an unslightly joint.*
6. *When the joint is fully soldered, remove the tip but do NOT move the pieces until you see the solder turn from a liquid silver to a matt silver. Do NOT touch with BARE fingers. Let the joint cool.*
7. *If flux was used, clean the joint with a solvent (lighter fluid).*

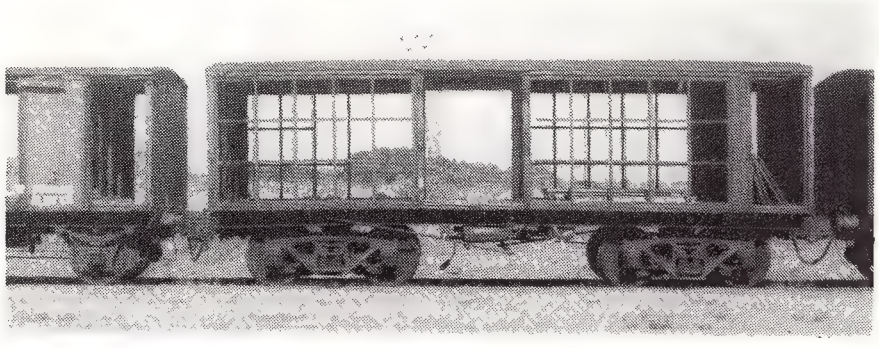
Underbody Detail

The King Post is fitted first. Cut a square piece of 0.030" styrene to fit between the flanges of the solebar. Glue this to the external face of the solebar on the vehicle's centreline. Fit one either side. At the halfway point of the solebar's depth, use a No. 79 drill to make a hole.

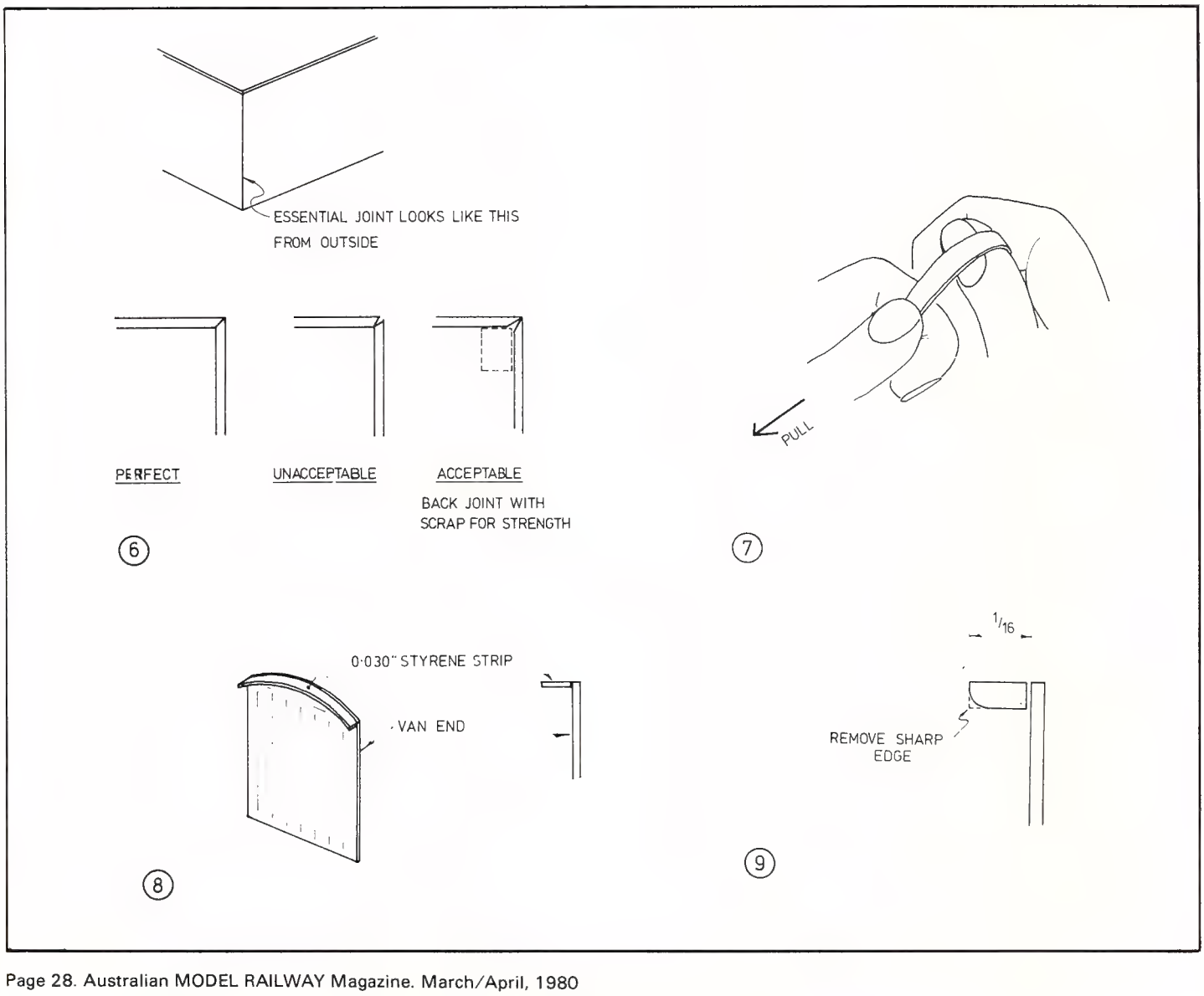
At approximately ⅛" from the end of the wire bend it to a right angle. Cut off a length of the wire about 2' - 0" long. Position the bent end in the drilled hole, making sure the remainder of the wire is perpendicular to the solebar, and glue from behind the solebar using Superglue. When completely dry, cut off a scale 1' - 6" below the solebar. See Diagram 13.

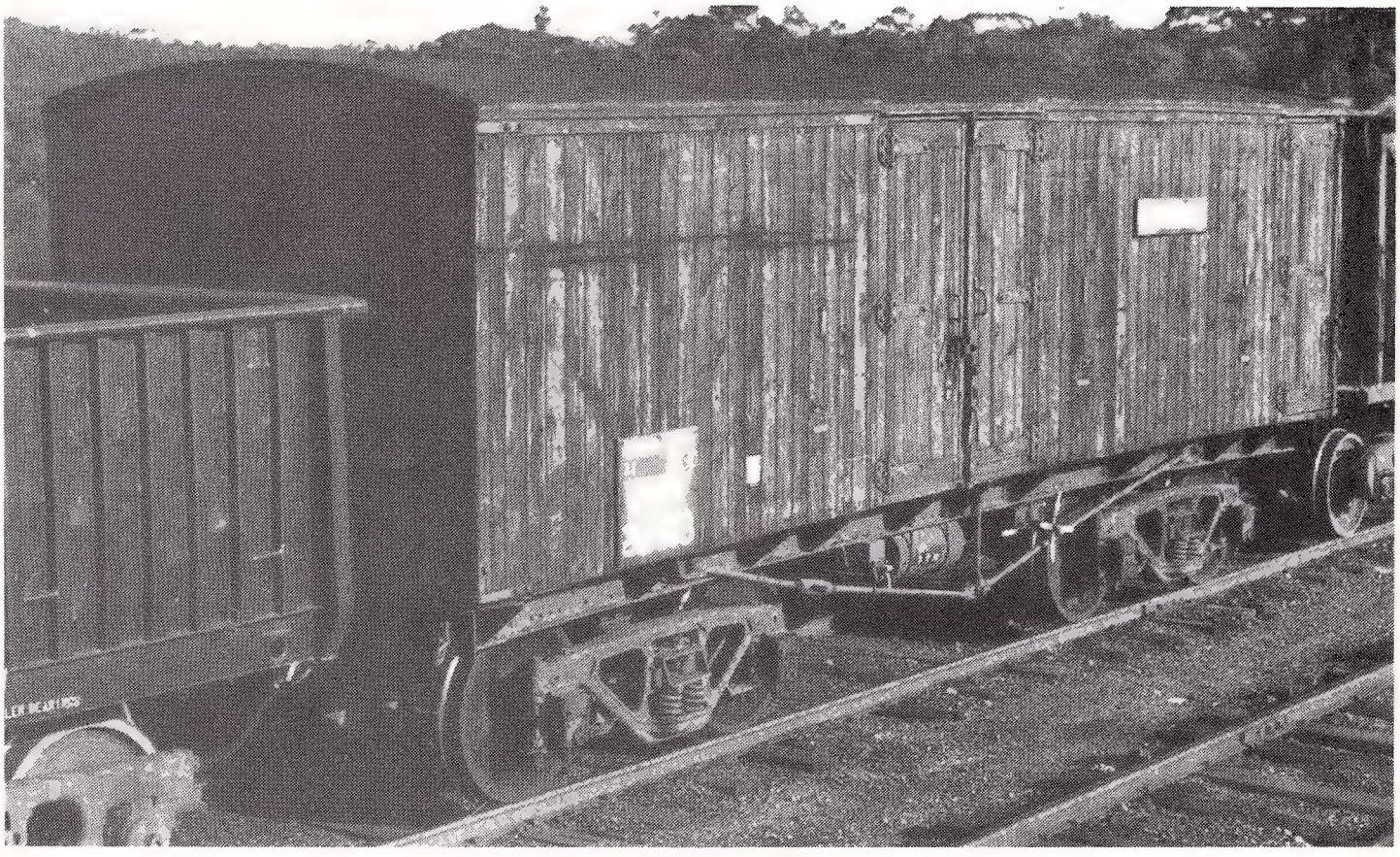
Note:- If you don't possess a drill,use a heated lace pin to force the hole. Heat the pin over a match and work through very carefully.

Now for the truss rods. As seen from the

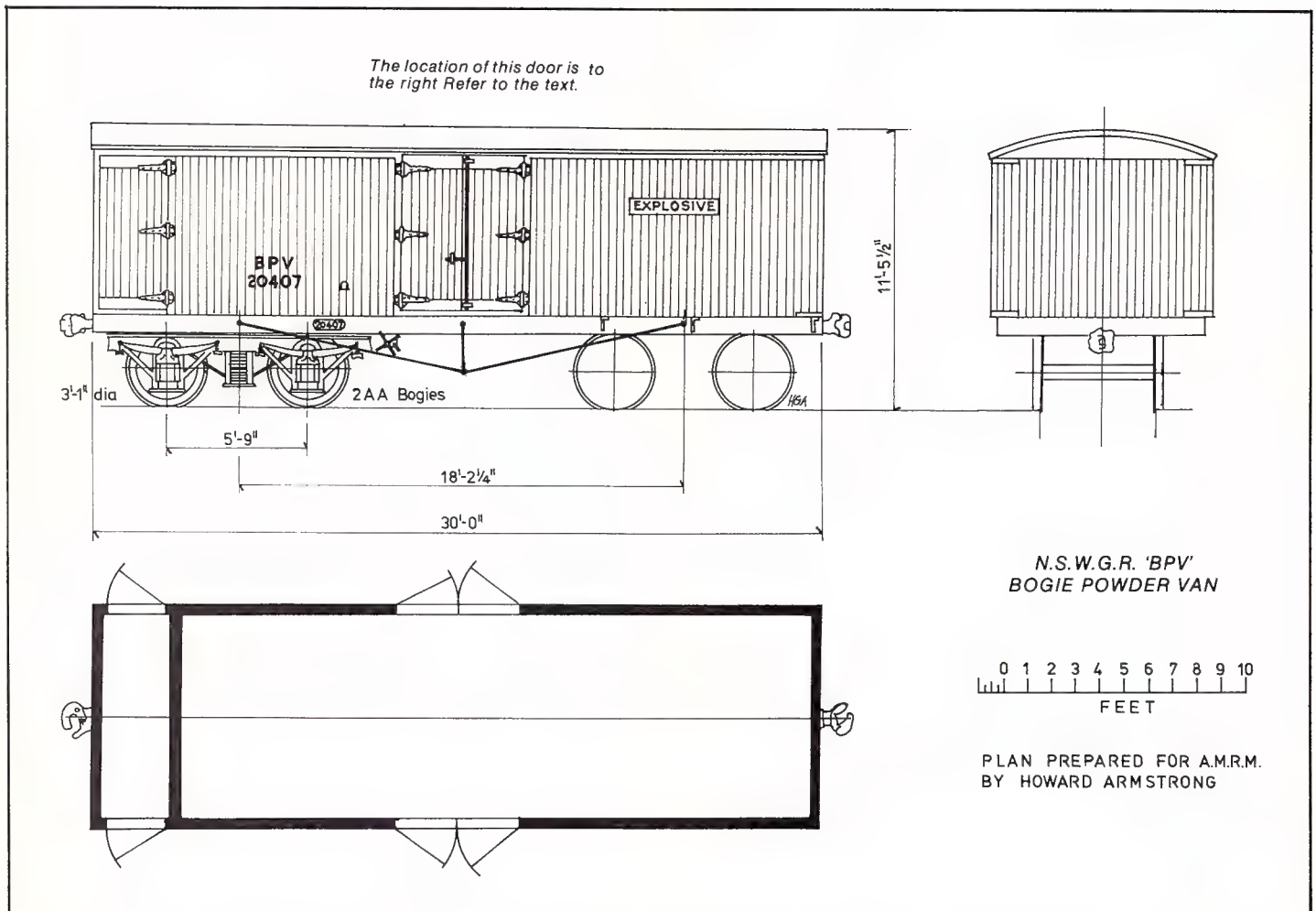


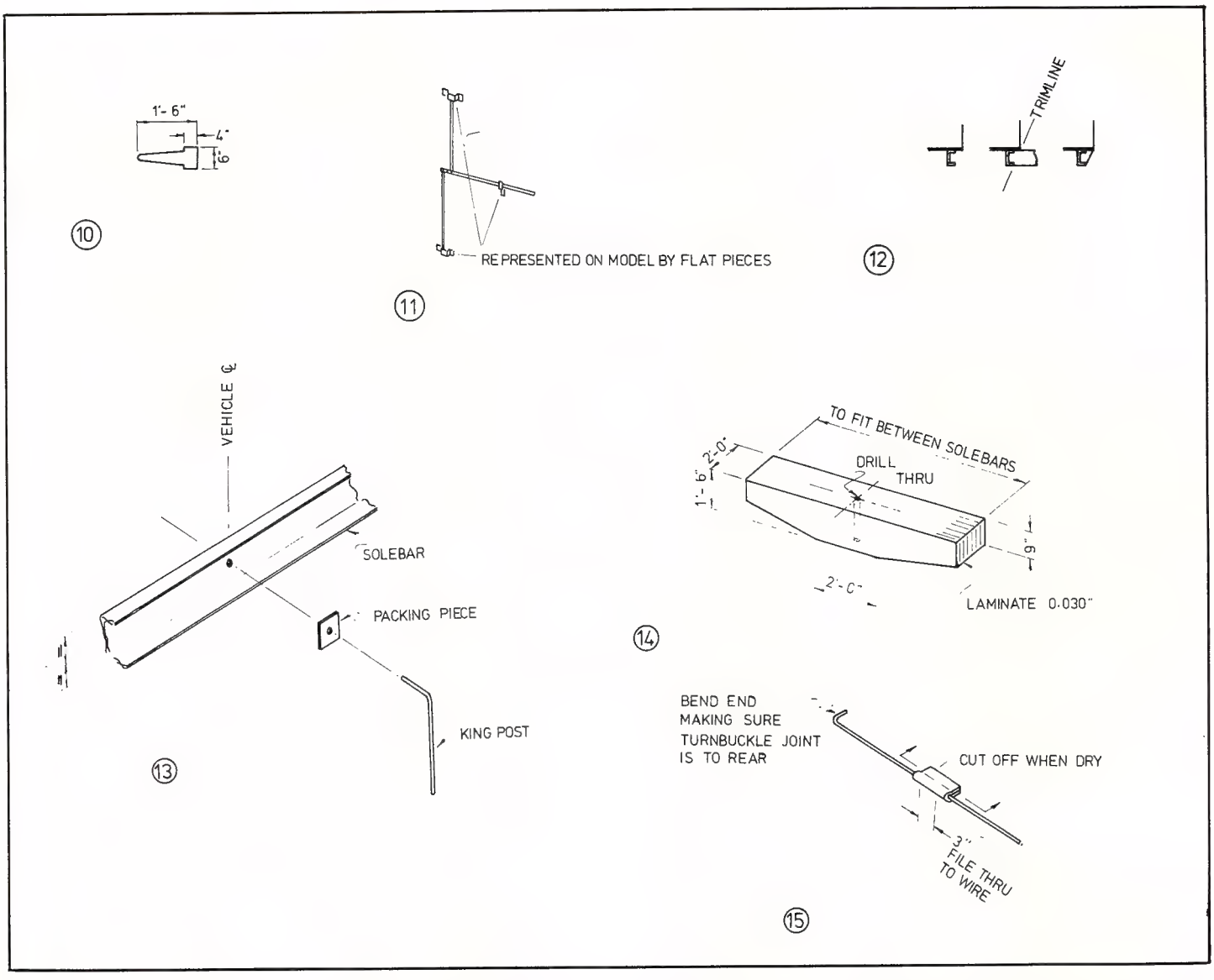
A modellers dream, the frame of a BPV just waiting to be photographed.





Basking in the afternoon sun, at Waterfall, weatherbeaten BPV 20403 awaits repair. Note the lack of paint and the scrape marks on the timber side. Photo by Bob Gallagher.





photos, each side of the vehicle has two truss rods but only one turnbuckle. Commence by fitting the turnbuckle. This is made by wrapping around the wire a scale 6" wide piece of 0.005" styrene. The position of the turnbuckle can be estimated from the photo. This is not critical but should be approximately halfway between the King Post and the anchor point.

Cut, locate and fix a piece of styrene for the outer anchor point as for the King Post anchorage. Similarily bend the wire and glue into place. Test the location of the turnbuckle before gluing. When dry, cut the wire so that the end of it and the King Post coincide. Fit the non-turnbuckle truss rod in the same way. When all is dry, hold the ends of the three wires together and solder. See Diagram 15.

Note:- Too much heat will melt the solebar. To prevent this, clamp the wires together using either a radio alligator clip or a bobby pin. These will draw off the heat before it can damage anything; providing the iron is not left on the job for an extremely long time.

Finish the truss rods on both sides. I'm assuming that there are only two rods as the photographs are inconclusive. When I checked out a burnt out BPV, I didn't write down the details. There's a lesson to be learnt there.

Bolsters. The bolsters can be either purcharsed or made. Model Dockyard sells a cast metal bolster and Northeastern makes a wooden version. If you wish to make them see Diagram 14. Use pieces of 0.030" styrene, file to shape and MEK together. Make two.

Drill a fine hole at the dead centre of the underface of the bolster. Locate the position of the pivot pin on the van floor and drill a fine hole through.

Note:- Measure in from both sides of the vehicle to ensure the centreline is correct.

Trial fit the bolsters with the fine drill fitted into the hole of the bolster and the floor. If necessary, trim the outer edges of the bolster to allow it to fit between the solebars. When satisfied, fix in place. When set, open up the fine hole to the diameter required for the chosen mounting screw. Refer AMRM Issue 86, Sept/Oct. 77, Page 24. An 8BA is an acceptable screw.

The reason for this complicated procedure is to ensure that the van does not lean to one side when sitting on its bogies. If at any time you are doubtful about the fit, glue the bolsters using Tarzan's Grip. This way the results can be checked. After any adjustments have been made, simply MEK the bolster.

Couplers. As I mentioned in the beginning I have used Kadee MKD 5 couplers. To mount these, read the manufacturer's instructions. The buffer beam will have to be cut to allow the coupler pocket to fit correctly. I found that the height of the pocket was incorrect when hard against the floor and that packing was needed. The recommended mounting screw, in this case, is the 2-56 but an 8BA will suffice.

Underframe. The underframe is a standard NSWGR steel type as per Diagram 1. The central spine is represented by two pieces of Plastruct C-4 channel, 12" apart, running between the bolsters only. This prevents any interference to the coupler. The angled channel in each corner is from Plastruct C-3 channel. File the ends to fit flush to the buffer beam and the bolster. If required, space Plastruct angle A-1 at 2' - 0" centres between the bolsters. A small section of the leg will have to be removed to allow it to fit flush to the central spine.

Other details. If required, fit brake equipment. The brake cylinder should be fitted as it shows below the solebar and is necessary for the correct silhouette. Position on the vehicle's lateral centreline approximately halfway between the solebar and the central spine.

Painting. The whole van is painted matt weathered black (Floquil) and dusted with Floquil's weathering paints. The "explosive" decal was from Protype but I believe M & J also produce one. The sign board was painted matt red. The number was handlettered — something I can't recommend as the wood grain upsets the brush tip. Try white Letraset or decals from McBee's mail order firm.

Conclusion

For all that; the total time for construction:- 20 hours spread over 3 weeks.

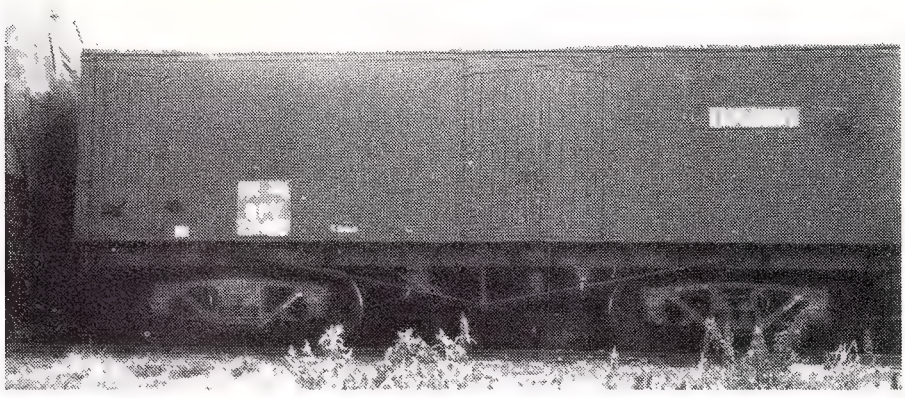
There are many more details that could be included but I feel that, if you have come this far, you should be pleased with your van. Take your time, don't rush and do the best job you can.

Postscript

As built the model is one of the

weatherboard type. The latest photos to hand show that BPV 20412 has a ply exterior. To model this, delete the section on scribing weatherboards. However the doors are still weatherboards. All other details remain the same.

Ply sheathed BPV 20412 in poor lighting, Junee 1972. Note that the doors are still T & G boards and that the double set are offset from the centre of the vehicle as noted in the text and plan.

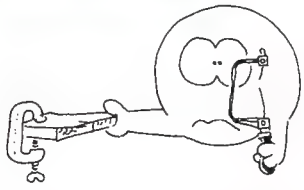


PROTOTYPE NOTES ON BPV CLASS BOGIE POWDER VANS OF THE N.S.W.P.T.C. by Paul Rogers

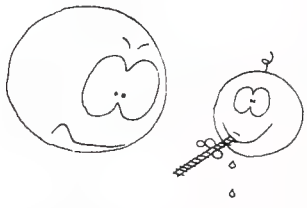
Powder vans operated by the Public Transport Commission of New South Wales and its predecessor conform to a basic design of a timber body mounted on a steel underframe, with separate compartments for the conveyance of detonators and explosives. When not used in their primary role, these vans can be employed for general freight purposes.

The series of BPV type bogie powder vans constructed by Clyde Wagon Workshops during 1958-60 is the subject of this modelling exercise. These units have been largely replaced by wagons tonnes. Automatic couplers were fitted at both ends of these wagons, which rode on 2AA type passenger bogies salvaged from condemned coaching stock.

The main compartment of cars 20391 - 20414 was served by double doors on converted from MRC class refrigerator cars and MBC class box vans, the more recent type of BPV being mentioned in a later article. The 24 vehicles built between 1958 and 1960 were allotted road numbers 20391 - 20414, had capacities of 6 tonnes (explosives) and 10 tonnes (general cargo), with a rated tare of around 19 each side of the vehicle, while access to the small compartment located at one end of the van was by means of a single door on each side of the unit. The wagons appear to have always been garbed in black or dark grey (for the bodywork), black (for the underframe) and white or grey (for the roof), as no record of any blue liveried vans of this type can be found. Modellers should note the distinctive "EXPLOSIVE" sideboards — in white lettering on a red background — which are a standard feature of New South Wales PV and BPV codes.



At 12.01 on Saturday of the long weekend you commence cutting out the frame of your new loco with the last jeweller's saw blade. At 12.03 . . .



"What makes you think the baby has been in your model room, dear?"

HORSEBOXES OF THE N.S.W.G.R.

Continued from page 21

expressed, but there is no evidence available at the present time which would support such a contention. Nevertheless, the N.S.W.G.R. and its successor have been known to swap carriage numbers and/or bodies on a number of occasions in the past.

The layout of the KKG consisted of a set of horse stalls at each end of the vehicle, thus providing for the movement of 6 animals. The centre portion of the car housed 10 grooms and attendants in two 'half dog-box' cabins, the space between these compartments being used for the accommodation of luggage and goods. Each section of the passenger area, though provided with separate external doors, was connected to the other by means of sliding doors fitted to the internal transverse bulkheads, the luggage compartment forming a changeover vestibule.

For traffic purpose, the KKG box was load rated at:

21 tons — when carrying 1 or 2 horses
22 tons — when carrying 3 or 4 horses
23 tons — when carrying 5 or 6 horses

Drawgear capacity of all KKG vans was set at 390 tons.

Car KKG.1529 has been preserved by the New South Wales Rail Transport Museum at Thirlmere.

Livery

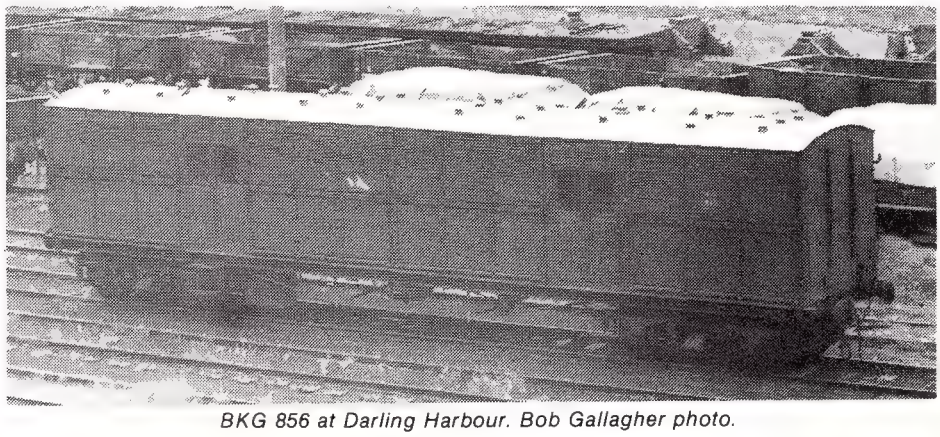
With the possible exception of cars 1790 - 1801 inclusive, all KKG cars seem to have carried varnished timber finishes when new. So too, the BKG units, apart from the possible exception of the cars introduced during 1946. In recent times, tuscan red was applied to both types as standard finish.

Drawgear

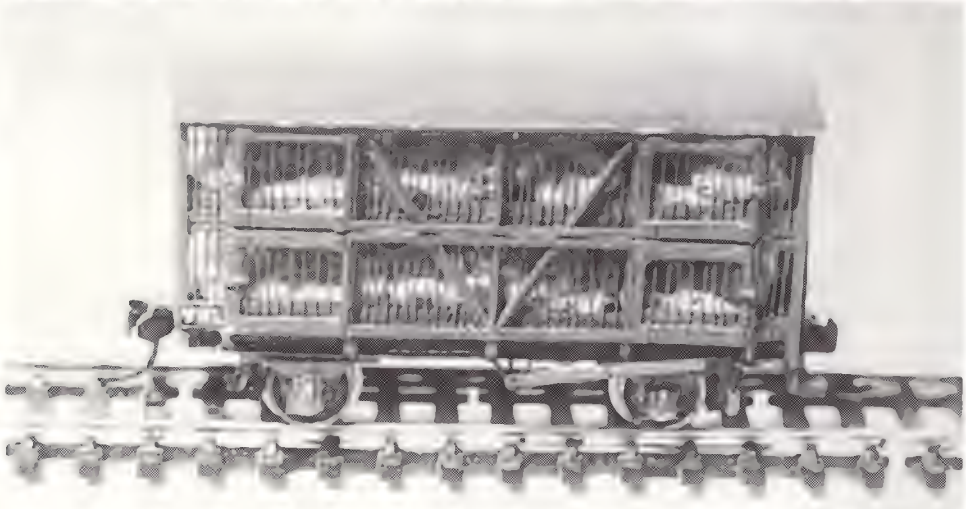
Side buffers and screw drawgear was standard equipment on all BKG and KKG class horse boxes, the early units of the first mentioned series being fitted with side chains as well, to allow coupling of these vans to goods wagons fitted with 'light drawgear'. As mentioned earlier, car 1524 was fitted at a late stage with a steel underframe and automatic couplers. The Kilborn — built cars of 1927-28 vintage were suitable for easy conversion to automatic drawgear because they were fitted with the Laycock system.

References

1. *'Engine Loads General Instructions dated 1/8/1949' (N.S.W.G.R.); pp.18 and 29.*
2. *N.S.W. Digest — 1966 to 1974 (various issues).*
3. *Weekly Notices of the N.S.W.G.R. — nos. 21/1893, 19/1900, 23/1902 and 42/1904.*
4. *N.S.W. Government Gazette dated 19 July 1862.*
5. *N.S.W.G.R. Annual Reports of 1863, 1865, 1866, 1871 and 1875 — 1887 inclusive.*
6. *R.K.E. Woodhouse, 'Reports of 1889 by William Thow, M.I.M.E. and R. Price-Williams, C.E. on the Locomotives and Rolling Stock of the N.S.W. Government Railways, with some Comment Thereon', A.R.H.S. Bulletin No. 393 (July 1970); pp.161-66.*
7. *'The Haslem's Creek Derailment (1858)', A.R.H.S. Bulletin No. 196 (February 1954); pp.17-21.*
8. *R.S. Fookes, 'The Bathurst Accident (1890)', A.R.H.S. Bulletin No. 209 (March 1955); pp.28-36.*
9. *N.S.W.G.R. General Appendix — 1902, 1910.*



BKG 856 at Darling Harbour. Bob Gallagher photo.



SCENIC ROUTE

SCENIC ROUTE this issue is a coverage of the model railway competition held by the Southern Division of the Southern Cross Model Railway Association, held at the RAAF LAVERTON Model Railway Club rooms in November 1979.

There were two categories only (structures and rollingstock) with locomotives included in the rolling stock section. The divisions in each category were kitbuilt, kit modified and scratchbuilt. The results were:

1st Place:

Peter Maxwell for a scratchbuilt sawmill.
Bill Hoare for a scratchbuilt VR 'L' class sheepvan in HO scale.
Peter Maxwell for kit-modifying a Union Pacific SD40-2 in HO scale.

2nd Place:

Bill Hoare for scratchbuilding a VR 'X' class diesel in HO scale.
Barry Lewis for kit-modifying a workvan in HO scale.

3rd Place:

Paul Hemsworth for scratchbuilding a VR 'FQX' container wagon in O scale.

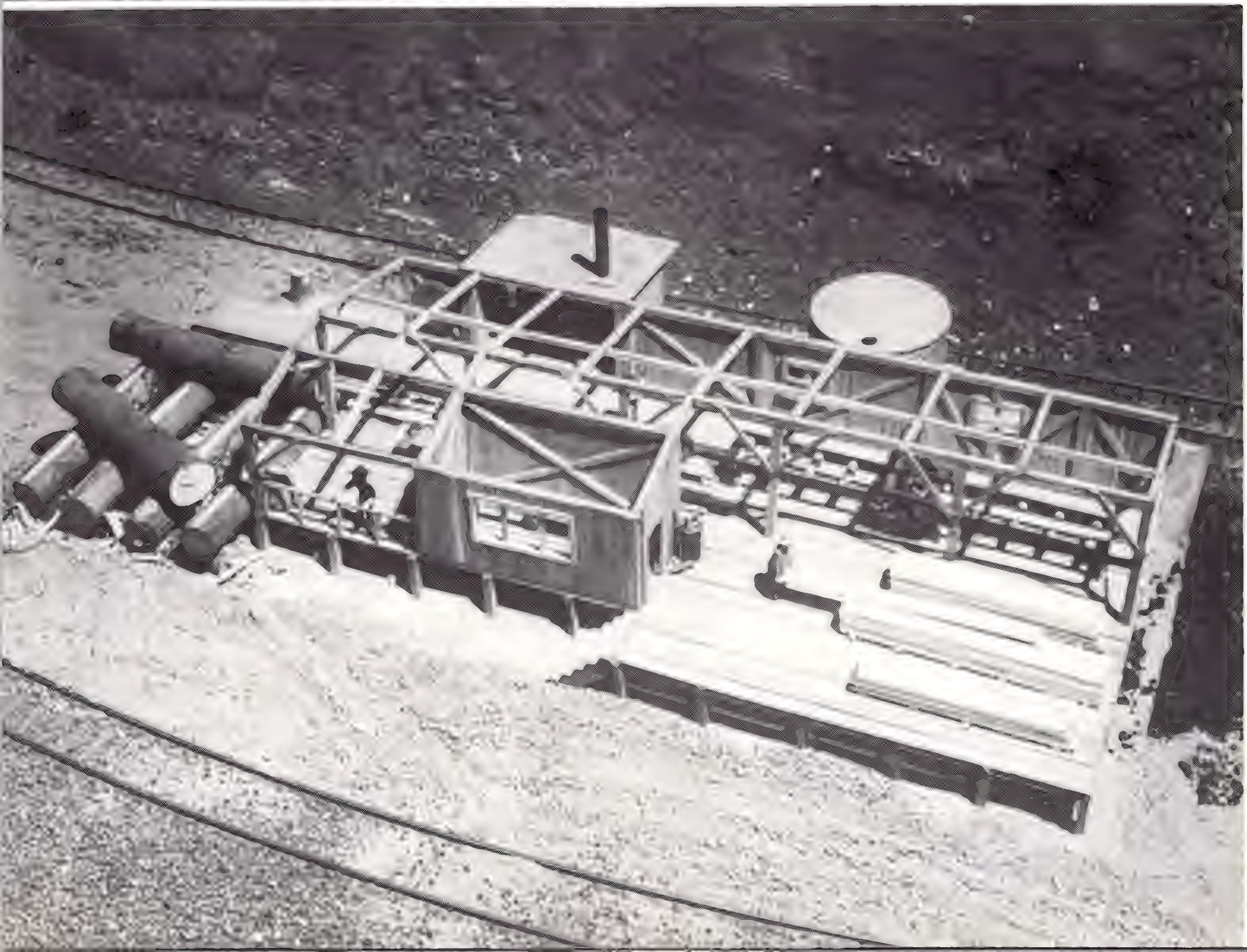
Encouragement Award:

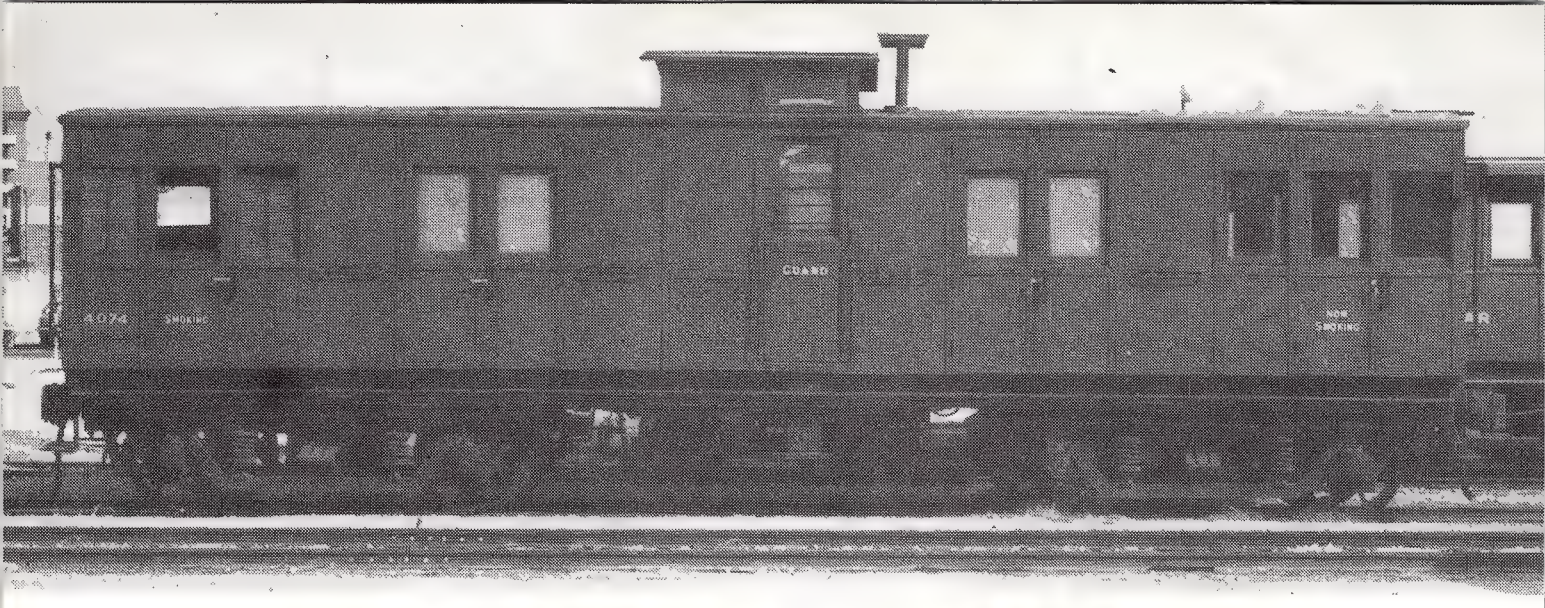
David Gawthorn for a scratchbuilt VR Walker 280HP railmotor in N scale.

The Best of Show Award went to Peter Maxwell's sawmill, with Bill Hoare's sheep van taking overall second place. Best of Show received a prize to the value of $30 from McBees Hobby Centre of East Preston, who sponsored and judged the competition.

The photographs on these two pages show some of the models.

This Page, Top: Union Pacific SD40-2 diesel as kit-modified by Peter Maxwell.
2nd from Top: VR 'L' class sheep van, scratch-built by Bill Hoare.
2nd from Bottom: VR 'FQX' container wagon in O scale, scratchbuilt by Peter Hemsworth.
Bottom: VR Walker 280HP railmotor in 'N' scale by David Gawthorn.
Opposite Page: Two views of Peter Maxwell's sawmill; a superb scratchbuilt structure.

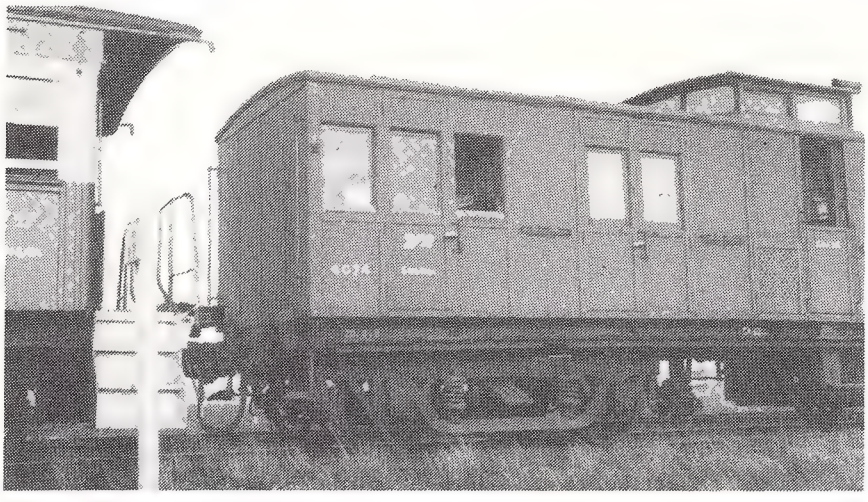


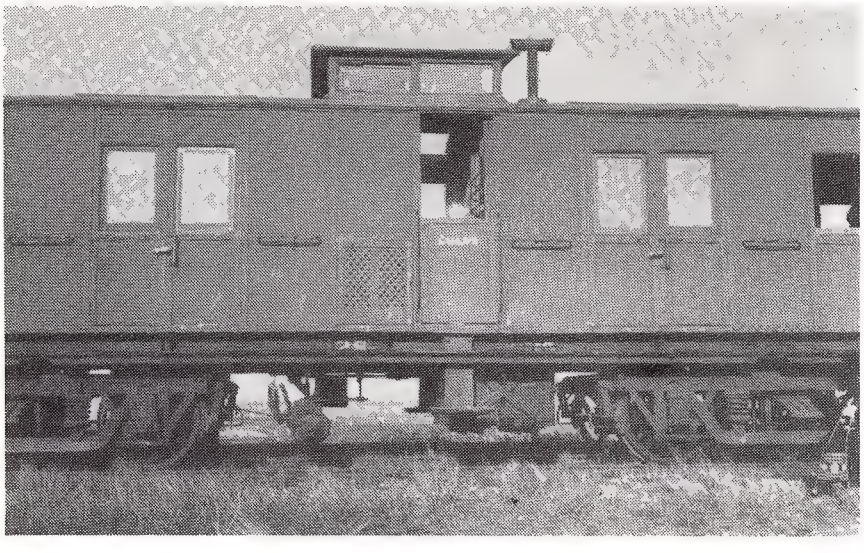


SAR's VINTAGE COMPOSITE BRAKEVAN 4074

This steel underframed and wooden bodied brakevan was issued 29/5/1919 being one of an order for twenty (4062-4081) in a class of sixty two similar vehicles. It was equipped with electric marker lamps but these were replaced during the Webb era as the kerosene fired lamps gained favour. The bodywork has retained its original design and virtually the only significant modifications were the fitting of automatic couplers in the 1930s and the removal of buffers in the 1940s. Both of these were part of SAR upgrading programs for all rollingstock. 4074 may have had the combination auto and screw couplers for part of its career during the conversion program.

There were a large number of different variations of brakevans built to the same overall dimensions either as goods or compo vans. It wasn't until the 8300 type steel bodied brake vans arrived during the 1940s that the number of wooden bodied vans began to dwindle. The fiftieth 8300 type was delivered in 1963 and shortly afterward twenty one wooden brakevans were withdrawn. Early in the 1970s guards protested about having to travel in old vans that did not even have toilets. By 1973 most of the old style vans had gone except for the 4400 class which were built in the early 1950s and fitted with a toilet and a distinctive end platform. Only six of this group remained in 1977 and they all went not long afterward being converted into workers cars except for 4417 which is the Steamranger on-site tool van at Mile End. Refer to the AMRM Sep/Oct 1968 for a plan of the 4400.



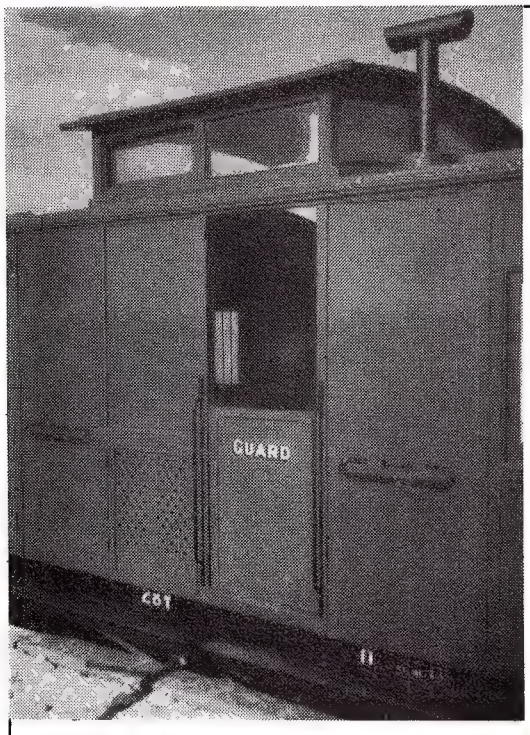


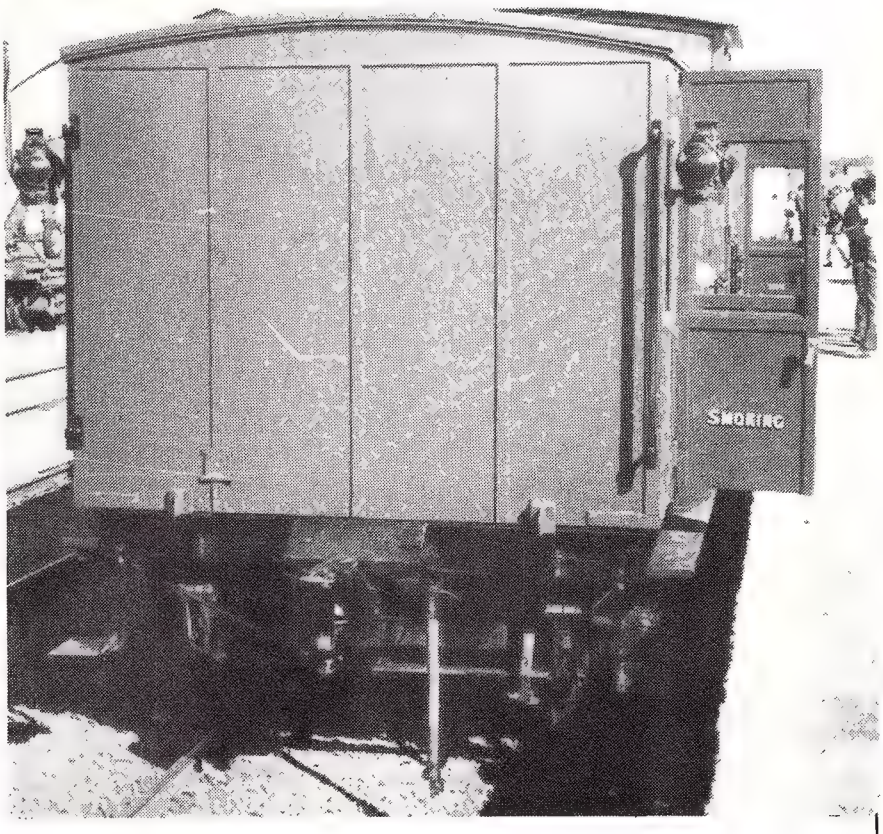
Thankfully there was also one survivor of the old vans-4074. Along with others of its type it went into storage at Islington. However, the Union concerned agreed that it could continue to run on Historical trains only. So while the others got the axe this one got the treatment emerging in 1973 with a new lease on life. It had received a complete internal and external repaint and was returned to service for a tour behind Rx224 to Finniss on the Victor Harbour line. Passengers who rode the thinly cushioned seats on the downhill run into Strathalbyn were adamant that only the ride had not been improved.

With a tare of only 28 tonne it is popular with Tour organisers who have to watch their train loads when working over the Lofties. It is popular with passengers also because it is built like a dogbox carriage and they can travel undisturbed in the end compartments which have a total seating accommodation for twenty hardy souls.

In 1976 the future again appeared cloudy for 4074 as the SAR decided to withdraw all wooden bodied passenger rollingstock. By Easter 1977 the suburban trailer coaches used in Red Hen sets had been withdrawn and the green and yellow Centenary coaches were a month to month proposition. Following protracted discussions the SAR and ARHS came to an agreement on the operation of the Steamranger Tours and they continued to operate but with restrictions. When ANR took over responsibility for the country operations of the SAR the old coaches were placed under the control of Metrorail which is operated by the State Transport Authority. With this arrangement the future for the four steam locos, centenary cars and 4074 appears reasonably secure.

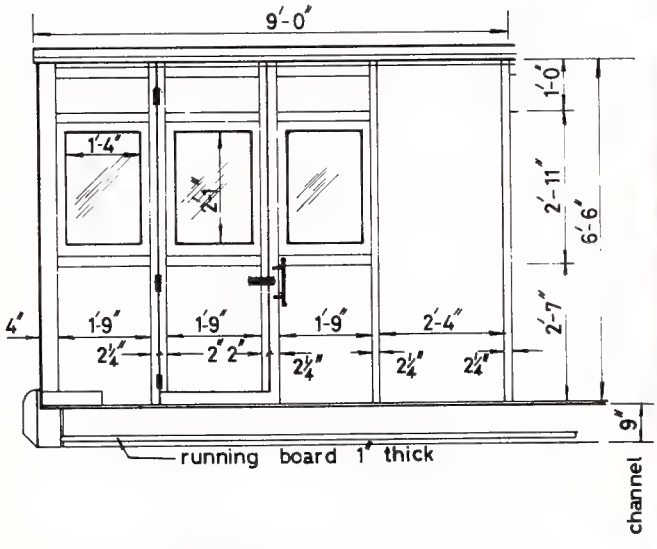
Photos and notes by Phil Curnow.

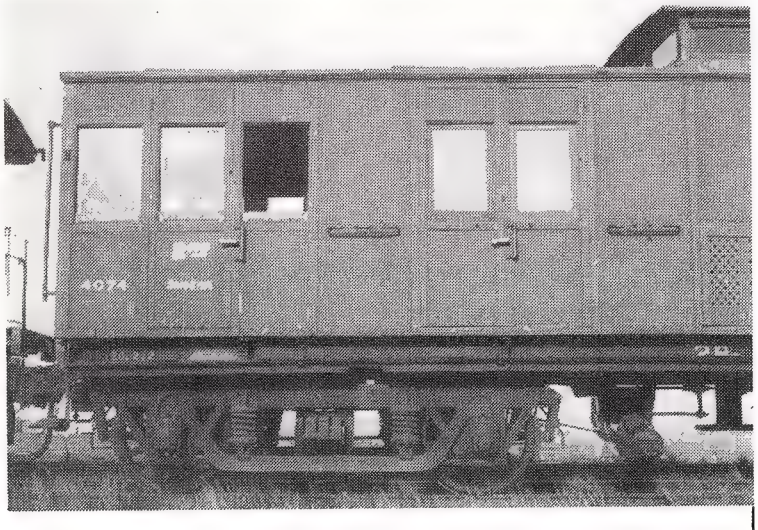




Colourscheme
Body — Coaching red, black roof, silver numbers tan window frames. After 1973 whole of body coaching red.
Chassis — Black, white lettering.

Side detail twice HO scale



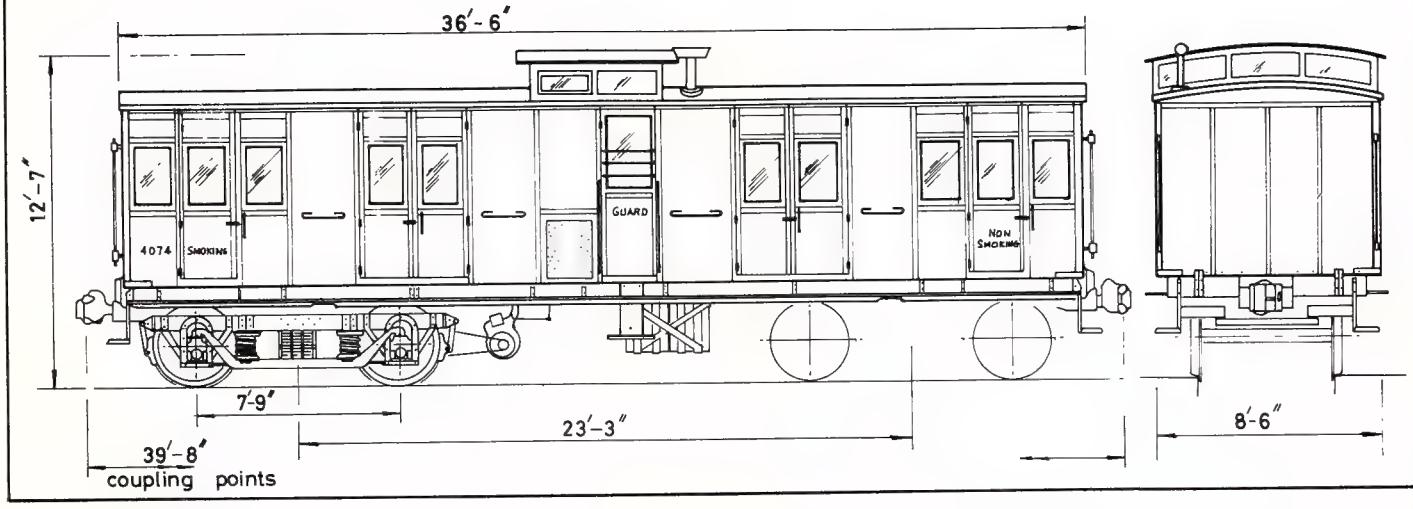


SAR BRAKEVAN 4074

Load — 20 passengers
8 tons
Tare — 19 tons

drawn to HO scale

Original plan by Hugh Williams. Plan prepared for AMRM by Ray Love.



THE TRACK

Frank Kelly describes his method for hand-laying track.

Most readers realize by now that I work to an odd track gauge of 20mm with a scale of 1mm = 3 inches and, in past articles, I have outlined the conversion of wheel sets for locomotives and cars. The track is, of course a lot simpler but, still an interesting subject for an article in this magazine.

As my models are all of the historical, or old time, VR type, the track must also be the same. This calls for light rail in a shallow roadbed, ballasted in part with white quartz from the mines. The Daylesford and Alexandra lines are good examples.

In keeping with the foregoing, code 65 Peco rail is used. The problem with this rail is that when it is hand-spicked the over-size base thickness makes the head of the spiked too high. This means that the spike fouls the flanges of our, so-called, scale wheels. Another problem with hand-spiking on site is that some corners of all layouts are hard to get at. The solution to both these problems is not to use spikes at all and to assemble the track on the work bench, sitting in a comfortable chair.

The old saying that "necessity is the mother of invention" surely applies here. I investigated all the known methods of track laying and discarded the lot. The nearest suitable one was that of an English group who rivet the sleepers and solder the rail to each rivet. The result is very strong but takes a lot of time. Circuit board sleepers are also time consuming and the appearance (with wooden sleepers in between) does not look right.

After a lot of thought I designed the method outlined below. It is very strong and maintenance free, except for the task of cleaning the top of the rails.

Wooden sleepers are stapled together in gangs of two (see photograph). Straight track is assembled upside-down in a jig on the work bench, each staple is then soldered to the base of the rail. Once the sleepers are stapled it takes about ten minutes to assemble a three foot length of track. The sleepers are stained with a suitable dye using a large paint brush, while doing this the track should be located on old newspaper. When the sleepers are dry the sides of the rails are painted rust-brown.

To lay the track on the cork roadbed I use a mixture of:-

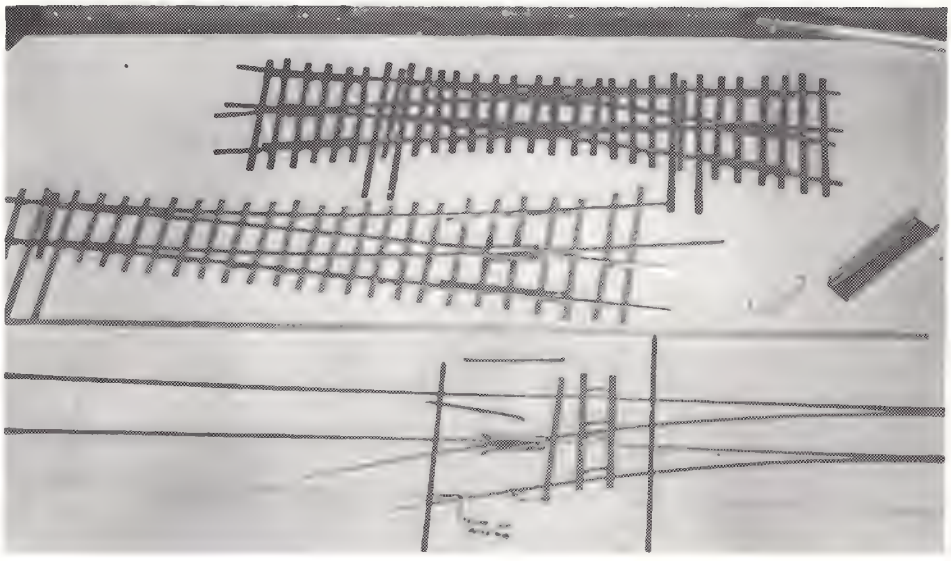
2 parts of printers latex glue (for making pads)
2 parts polyfiller
¼ part yellow ochre powder
3 parts water

The area of roadbed, where the track is to be laid, is painted with the above mixture to a thickness of about 1/16th of an inch. It does not matter if it is a little thicker in some places as it might flow over the top of the sleepers when the track is pushed down in place and this will add to the finished effect. The length of track or pointwork is now located and pushed down into place and taller grass material is sprinkled in here and there, thicker there and thinner here. The white ballast is then sprinkled on, not too heavy for we want the earth colour to show through. The ballast is screened coffee grounds dyed white with plastic paint in a small tumble machine. The tops of the rails are then weighted until dry. Then brush off the excess scatter material. We now have a typical branch line — a mud road in a mining area.

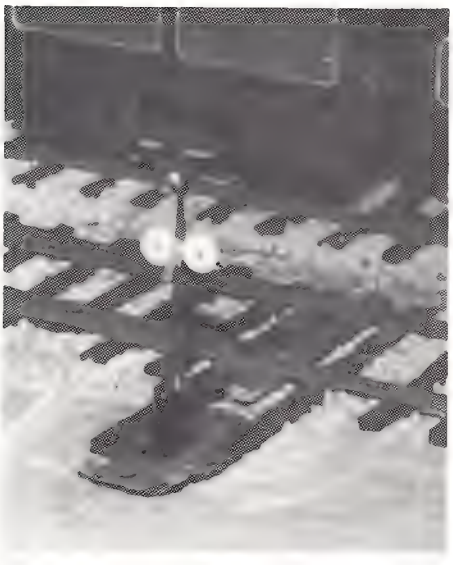
For curved track the sleepers are soldered to one rail only in the jig, this is then removed and the rail curved to the desired radius and the other rail soldered in place using a special track guage on the base of the rails.

Points and crossings present a slight problem in as much as they are tailor made and we must work upside down. The point-work configuration is drafted out on a large sheet of paper using various radius templates cut from old lithographic plates (the author is a Litho Printer).

The stock rails, points and crossings are then assembled on top of the drawing correct side up and held in place by soldering odd bits of rail across the top (see photograph). Then turn the assembly upside down and attach the sleepers. The odd pieces of rail are then removed from the top. The yard



From the bottom: a turnout being assembled (note odd pieces of rail soldered across the stock and lead rails) which has been assembled on a small piece of .006 thou brass, at the top a completed crossing with stained sleepers and gapped rails ready to lay in place on the baseboard.



A D.P.D.T. switch decorated with a switchstand.

Straight track assembled upside down in a jig. The jig is three pieces of strawboard glued to a three foot length of pine board. In the middle of the photograph is the staple machine, modified to staple the sleepers into gangs of two.

THE TRACK by Frank Kelly

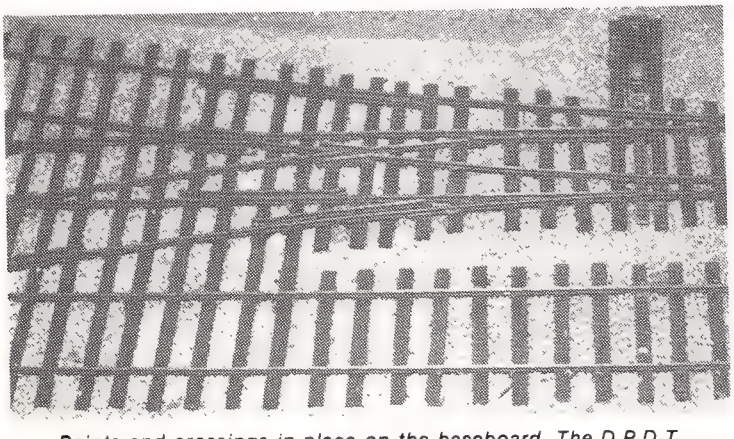
Dean, number three son, holds the yard entrance referred to in the text.

entrance shown in one of the photographs was made as an exercise and is all in one piece. It contains only one rail joiner and that was a mistake on my part. I cut that particular rail too short.

The only circuit board used is for the toe of the point blades. For a normal turnout, as shown, I have reduced the construction time to one and a half hours.

The original sleepers were cut on a Printer's Guillotine (just before the knife was changed) from 1mm thick, RAAF war surplus, three ply; this material is no longer available and I now use North Eastern ⅛ inch wide strip wood cut to length with a pair of sissors. Ten minutes work should see several thousand sleepers in a paper bag.

All I know about electricity is that it goes in one side of the motor and comes out the other, hopefully turning the armature in the process. I wanted to incorporate live crossings in pointwork so I use small D.P.D.T. slide switches to move the tie bar and, in doing so, change the polarity of the crossing and the road beyond. This slide switch is decorated with a prototype point lever. The one shown in the photograph is a V.R., wire controlled, point indicator and switchstand.



Points and crossings in place on the baseboard. The D.P.D.T. switch is yet to be decorated with a point lever.

THINGS WE TAKE FOR GRANTED

There are a lot of staples in the hobby that some of us take for granted. A lot of the time we assume that the newcomer we have just met knows of them already. It is not always the case. Below are a few items that are handy to know about.

The **Northeastern** range of milled wood shapes comes in stripwood and sheet form. The stripwood is available in all shapes; angle, channel, I beam section, etc., and in a wide range of sizes. In the sheets, milled corrugated, weatherboard, scribed, board and batten, and many other shapes are available, again in a range of spacings.

Plastruct has a range of styrene shapes, similar to the Northeastern stripwood range.

Kadee couplers are almost in universal use by operating modellers. They are very close in appearance to a prototype knuckle coupler, are fully automatic in coupling and uncoupling, and are very reliable when properly installed. They are made in a range of shank lengths and heights to fit a wide variety of stock.

Foquil paints are a handy alternative to the more widely known Humbrol range sometimes. They are much thinner — almost water consistency — yet cover better than Humbrol, and so provide a very thin coat without hiding small details. A wide range is available, in matt finish. That is more useful, as nearly all prototype paint weathers to a matt finish.

Proportions of Glaze are added for satin or gloss colours.

A **scale ruler** is used, not only for building models to scale, but for measuring a drawing that is drawn to a different scale to that you are modelling in. For instance, an S scale drawing can be measured with the S scale side of your ruler, and transferred to your work with the HO scale side. For modelling in N scale, you may need two rulers. You may not find a general scale ruler that has an N scale on it.

For more reliable running, **replacement bogies** are available. They usually comprise pin point axles which provide very free running, and N.M.R.A. RP 25 shape wheel profiles, which provide near derailment proof running, besides looking much better with a much smaller flange. Kadee and Central Valley are two popular brands, and they are available in a wide range of sideframe shapes. Not all bogies need replacing however. Some brands, Athearn for instance, come fitted with bogies that meet N.M.R.A. standards.

There are a number of **four wheel wagon underframe kits** around that make it easy to increase the number of four wheel wagons on your layout, if you model in HO or OO scales. These kits are very inexpensive, and also have brake gear moulded in. For Australian prototype, scratchbuild your own bodies, and replace the wheels with the correct 10.5mm dia. ones, for HO scale. Some brands need chasing, but the following have been available in Australia, in various shops: Ratio (two types), Slaters, 3H and MAJ.

Go and see your hobby dealer for these items. The better stocked ones keep these ranges as a matter of course. If your dealer hasn't got them, he usually has a convenient way of getting them for you, or you can order them yourself by mail from the advertisers in this magazine.

Ross Hurley

RECODING OF ANR WAGONS

THE AUSTRALIAN NATIONAL RAILWAYS INTRODUCES THE FOUR LETTER CLASSIFICATION FOR ITS BOGIE ROLLINGSTOCK USED ON INTERSYSTEM WORKING.

The Railways of Australia have recommended a four letter classification for all rollingstock used in Intersystem traffic. Of the four systems involved the Victorian Railways were first cab off the rank and a list of their recodings and an explanation of the meaning of each letter was included in the July/August 1979 issue of AMRM. A brief mention of the proposed NSWPTC recode list followed the VR list.

On September 10 the ANR began recoding rollingstock so to keep all the modern image fiends glued to their letraset sheets we are printing this list. There are several points to note about this list.

(a) It is only bogie rollingstock that wanders onto other Railways that will be recoded.
(b) This list includes vehicles owned by either of the two mainland systems that combined to form ANR so for interest sake each classification is divided into two groups. From this you will note that the old Commonwealth did not own bogie cement hoppers or explosives wagons that were suitable for intersystem traffic.
(c) Intersystem wagons are not necessarily bogie exchangeable. For instance most of the old Webb style wagons of the SAR such as M, D, FB etc. are not suitable for bogie exchange but can still be found in Victoria thanks to the common gauge of 1600mm (5'3" for you old timers). Some types of ex CR wagons such as the RO are not bogie exchangeable but nowadays can theoretically wander the standard gauge from Perth to Brisbane and Melbourne. This is not likely to occur as they are usually restricted to local ANR working. Others such as the long cattle wagons wouldn't fit through NSW tunnels. They are still all recoded to the standard for the sake of uniformity.

Continued on page 40

The first letter

The first letter indicates the owning system which in this case is A for Australian National Railways Commission.

The second letter

The second letter generally describes the type of wagon

- B indicates covered van, box type
- L indicates covered van, louvre type
- R indicates insulated van
- H indicates bottom discharge hopper
- P indicates pneumatic discharge hopper
- O indicates open wagon
- Q indicates container flat
- F indicates non-container flat
- M indicates motor car wagon
- T indicates tank car
- S indicates sheep van
- C indicates cattle van
- W indicates well wagon

Note that ANR differentiates between sheep and cattle wagons whereas other systems use S for livestock and C for coiled steel carriers with the third letter showing which type of livestock is carried.

The third letter

Unlike the other systems the ANR has not attempted standard meanings for the third letter but simply chooses a suitable letter that shouldn't be easily confused with others. The one exception is the letter P which, if followed by a Y as fourth letter means the wagon is suitable for passenger train working.

The fourth letter

This indicates what type of bogie is fitted which then governs how the wagon is used

- A indicates one gauge running only at slow speed.
  (broad gauge up to 70kmh and standard gauge 80kmh)
- Y indicates one gauge running at fast speed.
  (up to 100kmh on broad or standard gauge)
- X indicates standard bogie exchange vehicle.
- W indicates low level bogie exchange vehicle (these have small diameter wheels and offset couplers for oversize containers).

INSULATED VANS

ex SAR	ex CR/ANR
RB	ARBA
RBP	ARPY
RRP	ARBY
RX	ARBX

CONTAINER FLATS

ex SAR		ex CR/ANR	
FCS	AQBY	RM	AQPY
SFCW	AQDY	RMA	AQMY
FOX	AQAX	RMX	AQMX
FQS	AQCY	ROX	AQOX
FQX	AQCX	RQX	AQQX
SFQX	AQDW	RO	AQOY

COVERED VANS

ex SAR		ex CR/ANR	
M	ABAA	VC	ABCY
MRP	ABAY	VD	ABDY
MG	ABBA	VEX	ABEX
		VFX	ABFX

SHEEP VANS

ex SAR		ex CR/ANR	
S	ASAA	S	ASAA
SBS	ASAY	SB	ASBY
SB	ASDA	SC	ASCY
SS	ASDY		
SSC	ASEY		

CATTLE VANS

ex SAR		ex CR/ANR	
C	ACAA	CB	ACBY
CS	ACAY	CC	ACCY
SCB	ACFA	CD	ACDY
SC	ACFY	CE	ACEY
SCC	ACGY		

MOTOR CAR WAGONS

ex SAR		ex CR/ANR	
ALX	AMBX	GCX	AMCX
ALP	AMPY	GG	AMGY
OAX	AMOX	GK	AMKY
OMX	AMMX	GN	AMNY
SAX	AMAX	GNX	AMNX

HOPPER WAGONS

ex SAR	ex CR/ANR
HS	AHSA
HC	AHCY
HB	AHBA
H	AHAA
HCA	APCY
HCX	APAX
SHCX	APCX
SH	AHWY
SHBX	AHGX

OPEN WAGONS

ex SAR		ex CR/ANR	
W	AOWA	GB	AOEY
O	AOXA	GBX	AOEX
OWS	AOWY	GD	AODY
OB	AOGA	GMX	AOMX
OBR	AOGY	GOX	AOOX
OX	AOXX	GQX	AOQX
OMB	AOXA		
ELX	AOBX		
OS	AOXY		
SGX	AOCX		
SGMX	AOFX		
SO/SOC*	AOQY		

* those of the SO/SOC fleet which are suitable for bogie exchange and therefore similar to the GQX will also become AOQX.

TANK WAGONS

ex SAR	ex CR/ANR
STAX	ATAX
STWX	ATCX

EXPLOSIVES VANS

ex SAR	ex CR/ANR
SE	ALXY

NON CONTAINER FLATS

ex SAR		ex CR/ANR	
FB, FBR	AFBA	RB	AFEY
PFB, PFBR	AFBA	RF	AFKY
SFB	AFBY	RG	AFGY
FBF, PFBF	AFFA	RGX	AFGX
FBT	AFTA	RL	AFLY
FBX	AFCX	RLX	AFLX
FPX	AFMX	RN	AFNY
SFBX	AFDX		
FWC	AFHA		
SFKX	AFKX		
SFWX	AWWX		

LOUVRED VANS

ex SAR		ex CR/ANR	
DW	ALAA	LB	ALBY
DWP	ALPY	LC	ALCY
DS	ALFY	LCX	ALCX
DWR	ALAY	LD	ALDY
LX	ALGX	LDX	ALDX
SL	ALHY	LEX	ALEX
SLX	ALHX		
D	ALFA		
SLP	ALPY		

MODELLING TIPS

Readers are invited to submit items for this column, including photographs and/or diagrams to help illustrate the modelling tip. Please send, along with your name and address, to The Editor, SCR Publications, PO Box 235, Matraville, 2036.

LIMA's S.A.R. 8300 class brake van.

The addition of Kadee couplers and smaller wheel flanges, as related by Bob Gallagher.

South Australian Railways (now Australian National Railways) 8300 class brakevan. Photo by Phil Curnow.

The arrival of the LIMA S.A.R. '8300' class brake van gave me the opportunity to overcome the brake van deficiency on my layout. The main problem encountered is that the 8300 has deep flanges (NEM standard) on the wheels and is fitted with LIMA couplings, both aspects disenabling the use of it on my track, for Shinohara pointwork and KADEE couplers are the ruling domestic standard. A few days after receiving the brake van I used the excuse of watching Clive Lloyd make 125 runs agains the Aussies on the TV to alter and work on my two vans. The actual task is simple and not very time consuming.

Disassembly

The first step is to complely disassemble the van. The bogies are a clip-in fit and will clip-out by gently, but firmly, lifting one end of the bogie until it unclips out of its socket. The same process removes both bogies. Remove each wheelset out of the bogie by gently bending the sideframe away from the pinpoint of the axle with a small screwdriver, and springing the axle out of the bogie. The floor of the van is held in by a small retaining lug each end. To remove, slip a fine screwdriver in between the end of the van and the floor and bend the end of the van away from the floor, until the clip is released, in turn releasing the floor. The metal weight will fall clear and the window section will unclip away from the windows and out of the van body.

Reducing the Flanges

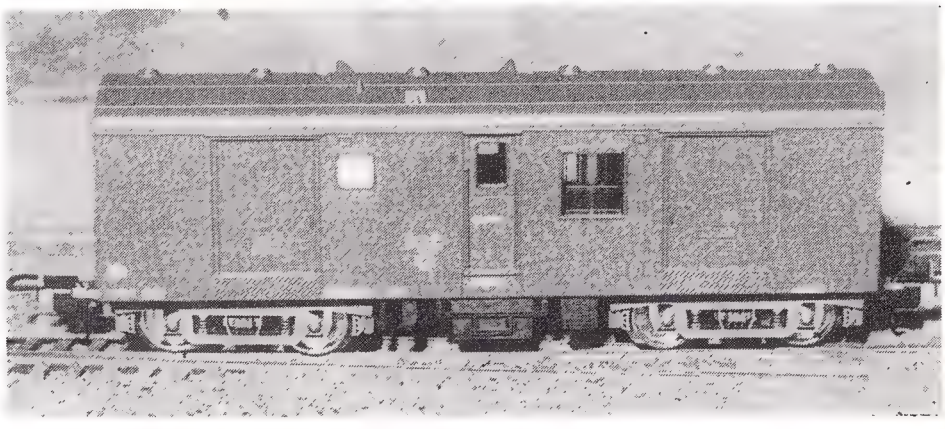
LIMA flanges usually exceed 1.2mm in depth and for RP25 clearance need to be smaller than 0.6mm. A lathe is usually necessary to reduce the flanges and those possessing a lathe can make use of an electric how to reduce the flanges, but modellers not possessing a lathe can make us of an eletric drill, so long as it has the capacity to hold a 11.2 mm wheel in the chuck. First, fix the drill into a vyce or a drill stand. Clean the drill chuck of any dirt or grit, and place the wheel in the chuck, leaving about 1mm clearance between the tip of the chuck and the flange. Ensure that the chuck is tight, set the drill speed for high, and switch the drill on so that it runs continuously. Using a 4" to 6" flat warding file (and keeping your fingers clear of the spinning chuck) apply the file to the flange, stroking against the direction of the spinning wheel. Gentle strokes are recommended; constantly checking that you do not remove too much flange is far better than removing all the flange in error. When complete, clean both edges of the flange with the file and check that the back-to-back measurement between the wheels measures 14.5mm; if not, rectify the deficiency by gently working the insulated wheel in the correct direction on the shaft. To help hide the width of the wheel paint it (apart from the tyre, flange and axle pin-point) black and set aside until needed.

New Wheels

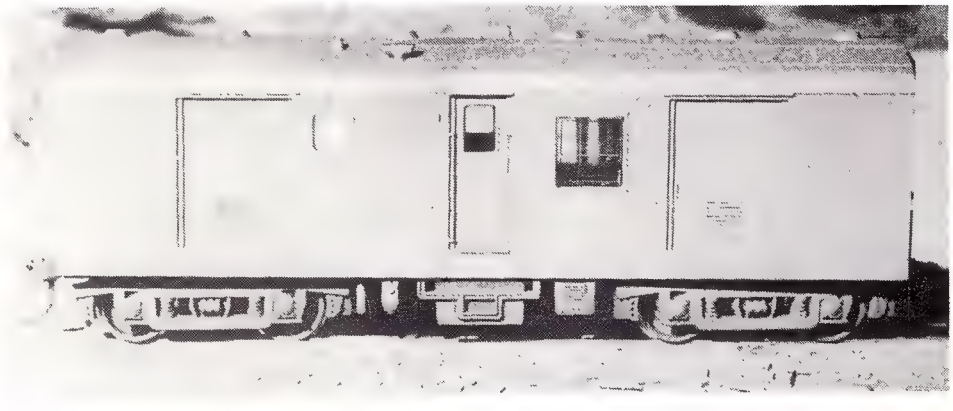
Some modellers choose to fit new wheelsets instead of modifying the units supplied. Both Tenshodo and Roco make a wheel that will fit the 8300 bogie, if they can be found in a hobby shop, and it is possible to fit other brands of wheelsets once the distance between pin points has been reduced, but be aware of fitting wheels too small (or smaller than the supplied 11.2m wheels) for the vehicle will not only look unusual but may allow the bogie side frames to drag on the track.

Fitting KADEEs

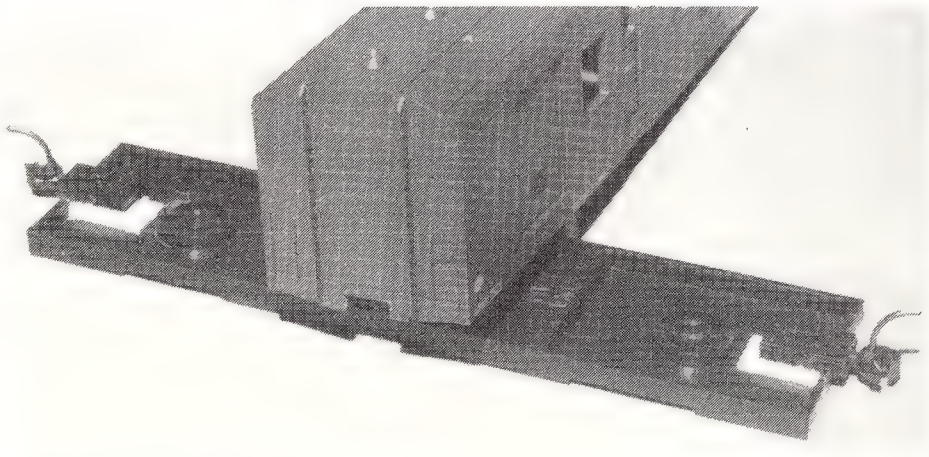
Fitting Kadees to the '8300' is at first glance very difficult, but in the end it is not as hard as it appeared. The first step is to cut the existing LIMA coupling off the bogie with a razor saw, trimming clean with a file. With a sharp blade cut away a section of the arched centre bogie support as in Fig 1. Using 1mm (0.040") thick styrene sheet, cut a section 7mm by 13mm and glue it in place as per Fig 2. MEK solvent proved to be satsifactory. Set aside to cure, the same process to be applied to both bogies. The styrene section should be painted black (it would not hurt to paint all the bogie Floquil Grimy Black for better appearance), the



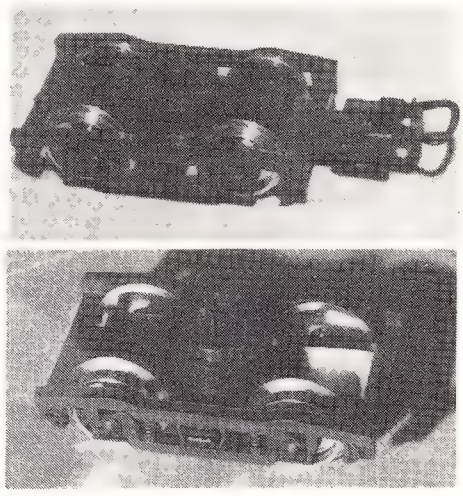
As supplied, LIMA's HO scale model of the S.A.R. (A.N.R.) '8300' class brakevan. G. Ball photograph.



A few hours work, plus a little paint, is shown by the above model of the '8300' van, as altered by the author. Photo G. Ball.



The above photograph illustrates the floor section with couplers in place and the body section with hole filed out for coupler access. Note the styrene blocks under the couplers on floor section.



The above two photographs illustrate the bogie as supplied (top) and the bogie with the coupler and part of the bridging section cut away and replaced with a section of styrene. (See text.)

wheels inserted and set aside for addition to the floor of the van when required.

Kadee No 5 couplers were used, being preferred for reliability against the often haphazard operation of the other couplers which have small pockets. Fabricate a section of styrene 10mm × 8mm × 2.7mm thick. The use of 1 mm and .75 mm thick sections added together will suffice. This section is to be located as a coupler pocket base, and should be sited in the centre of the underfloor section, up against the end wall. Use the floor retaining lug as a guide. Secure the MEK and leave to cure.

Next remove a section of the end of the underfloor 8mm wide in the centre of the floor, down to the newly added coupler pocket base. Check that the coupler pocket fits snugly in the cut away section. The same process must be applied to both ends of the floor section. (Fig 3 for reference). Place the floor back into the van body, noting that the retaining lug has been cut away in the previous process. A section must now be removed in the end of the van to allow the coupler pocket to penetrate. The opening has to be 8mm wide and in the centre of the van. A razor saw will easily cut the plastic and it is wise to cut inside the guide marks and file the opening to correct size. The depth of the opening is gauged by the opening in the floor section, and in most cases will only be as deep as the original opening for the floor retaining lug.

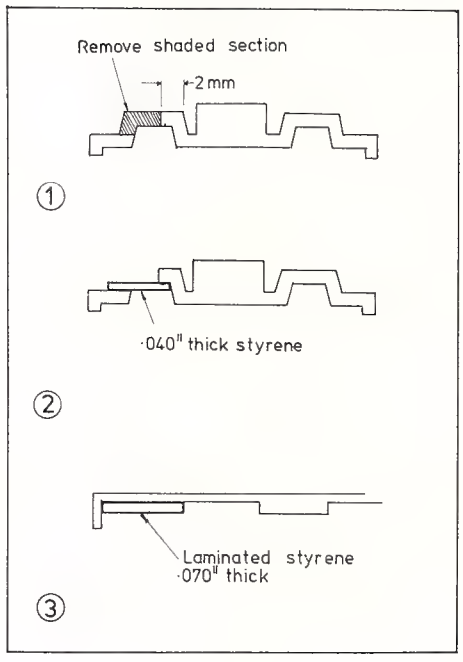
Assemble the Kadees and fit into each recess. If all goes well it will fit neatly. Individuals have the choice to either glue or screw the coupler in place, the writer choosing to glue the pocket to the coupler pocket base on the underside of the floor section. This is accomplished with a little care for it has to be right first time or a coupler is wasted. Place the coupler in place, correctly aligning it square with the body and apply the smallest amount of MEK possible to the rear of the coupler pocket/base, add the bogies to the base and try the vehicle against a Kadee coupler height gauge. If incorrect, quickly remove the bogies, and bend the coupler away from the styrene base, cleaning up any left-over residue with a file. If the coupler is too low remove some of the styrene base and accompanying material with a file: if too high build up with styrene sheet. But if all dimensions have been followed, and the same sized wheels used, all should be correct and the coupler pocket should now be secured in place. To accomplish this remove the floor from the body and apply MEK all around the pocket and the pocket base. Leave to cure, then paint the styrene to match the floor section.

After any other extra super-detailing or painting (weathering) it may be necessary to glue the floor in place. Out of two units one of mine had to be glued; the other is a neat fit and will remain unglued. For the unit that required fixing, Tarzans Grip was used, for it has proven to adequately glue two surfaces together yet still allow separation with a sharp knife if necessary in the event of future removal of the floor.

Extra Detail

There is always something extra to be added to a model, no matter how accurate the model is, for all modellers have their own standard of deteailing. This will apply to the '8300', despite the superb standard it has been produced to. Hopefully, AMRM readers will share some of their '8300' customising secrets with other readers, for all to benefit by.

I changed the smoke-flue from the stove by fabricating one out of 1/16" brass welding rod and used the prototype photo as reference. Shunters' steps were added to each end and a little weathering applied. The roof area was given a light application of Floquil Grime; the Rust used for a mud was used to weather around the bogies and areas where mud would be splashed/blown up onto the van. Finally, the van was given "a look at an air brush holding Floquil Grimy Black". The roof area was given a heavier application than the sides. The purpose was to imitate dirt and grime found on railway vehicles. The result was a different van to that supplied by LIMA. But no worries, they are only $6.95 each and there are more where they come from, and I have often been told that weathering is easy. One thing the extra paint has done is to hide the oversized weld ridges in the roof.



Editors Note: A full description and plan of the SAR/ANR 8300 brake van will appear in a future issue of AMRM.

ANR RECODING

Continued from page 38

(d) The meanings of the letters differ from that used by other systems.
(e) Repainting of the code is done at many locations beside Islington and Port Augusta workshops so it is common nowadays to see a wagon with the only piece of clean paint being the letter classification.
(f) On the broad gauge (Central Region) recoding involves repainting of the classification and replacement of an embossed metal plate attached to the sidesill because the old plate had the previous code.
(g) The wagon numbers remain the same.
(h) Errors will occur such as ASAAY instead of ASAY for a sheep wagon suitable for fast traffic. The sharp eyed modeller may find this worth looking for. Perhaps 'pick the bungle' may be the railfan's game for the 1980s.
(i). How this affects a modeller is worth considering. Not only does the modern image fan have to get the colour right but he has to learn a new set of codes. The introduction of metrics meant that the Railways had to modify their plans to include millimetres. SAR redrew most plans to a much smaller scale than the old ¼ inch standard which increased our chance of making errors when working straight off the plan. The old Imperial plans were all withdrawn and now the metric old code plans are being altered so if you write to Islington seeking plans be very precise about which plan you want and be prepared for a higher charge to cover the cost of the staff locating which original you require and then obtaining one copy for posting to you. At the time of writing there is no intention of dumping the Imperial masters.

prepared by Phil Curnow

MAIL BAG

Sir,

Permit me to offer a few words of welcome to your new cartoonist, Mr Dick Stein.

Both his cartoons in the Jan/Feb issue caused considerable mirth to both myself and my wife but the one on page 53 really hit close to home.

As a self-employed person in a service industry I have experienced a variation of the theme expressed in the cartoon when, on several occasions in this past year a late night (or early morning) modelling session has necessitated that I (or more accurately my wife) has had to ring clients to rearrange the appointment book.

The cartoon therefore struck in us a very responsive note.

Please let us have more of Dick Stein, and if he has any good excuses for his clients my wife would like to hear them.

I. Harley,
Rockdale, 2216

Sir,

I wish to point out a few errors in the series on Signalling. Firstly, the diagram in the September/October issue, Diagram No. 3 shows signal No. 4 exhibiting the same aspect as signal No. 2 yet how can one Distant have a different meaning to another — of course it can't.

Secondly, in the November/December issue a similar error appears in that issue but the author has also seen fit to omit two major types of two aspect Upper Quadrant signals. These two types are:—

1. double light signal that indicates a Stop aspect. This signal looks like a normal Distant signal of the type mentioned but the arm assumes a horizontal position and gives a red on red aspect. Locations of these signals are:

a. Arncliffe — on the Down Local Sydney end of the platform (near Wollongong Rd bridge),

b. Arncliffe/Banksia — on the Down Local Main on the Rockdale side of Forest Rd overbridge.

2. A double light automatic signal not equipped with phone. These signals looked like VR pointed semaphore signals but they have an offset co-acting spectacle plate. They exhibit normal double light aspects but, as they have no phones, they can be passed at Stop after the driver has stopped his train at the signal for one minute. The principle location for these signals was on the coal roads in Newcastle.

The articles on Signalling are, in the main, quite good, especially for the layman, but they fall down on the little errors mentioned in the first part of this letter.

Gregory D. Young,
HURSTVILLE, NSW 2220.

Sir,

Looking through a friend's old Tri-ang catalogues I can identify a particular item easily. But when I want to know how many were made, date made, current value, or is it a collector's item I'm just lost.

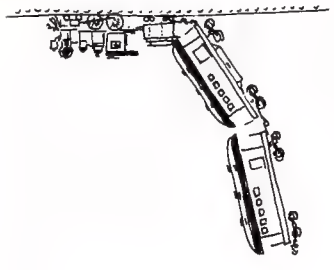
Is there a catalogue, book or similar that reveals such things so a person can learn what to look for?

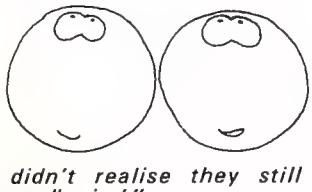
If so, would you please inform me through Mailbag. I'm new in this hobby and have not any experience in collector's items and would like to learn.

Also I would very much like to see a section showing an item of collectors' value and a little information on the same. This might be something to make your magazine extra interesting. Every time it is published a Collector's Corner should be included. I hope that other AMRM fans agree to this idea.

Frank Tabone,
Whyalla Stuart, SA 5608.

We are not aware of any such catalogue but maybe some reader can help. — ED.





"I didn't realise they still made 'Magnadhesion'."

Sir,

We feel that once again we must thank the members of the staff responsible for the prompt despatch of the AMRM and also for the manner in which same are packed. We received this issue and have received for some time now all mags in A1 condition.

The comments that we receive about the mag are most encouraging to us and particularly would be to those responsible for its preparation, we felt that you might be interested in learning that.

Of course, then there is about 2% among those who "whinge" about it, but some people you just can't please! We feel it is 'top rate' keep up the good work.

So we want you to add a further ten copies to our order . . .

Regards,
Vic.

Sir,

Now that the subject of Australian kit manufacturers has been broached by Mark Hendy (letters issue 100) I would like to stick my oar in. Australian made kits . . . Oh dear! Even the thought of them makes me wince. Mark Hendy is quite right and deserving of support in his efforts to obtain better quality.

Lets start with your lengthy reply to his letter. You quote the once reasonable but no longer plausible reasons for the poor quality of Aussie kits as being related to the sad history of Australian prototype modelling, but you also say that a market which warrants the interest of at least one multi-national manufacturer has been developed. Agreed, the past is lamentable, but it is past! Agreed, a substantial market now exists. So, wouldn't you think it would be wise of our manufacturers to do something to exploit that market? Rather, what they appear to be doing is to continue to try and flog off badly designed produced rubbish. There are some exceptions, FSM appears to be trying to improve the standards.

The problem seems to be a blatant unwillingness on the part of our manufacturers to develop what has already been demonstrated by overseas kit producers. If you look at the present British products you will find that high quality, finely detailed plastic injection moulding is the rule rather than the exception. And we are talking about cottage industry like Ian Kirk, Coopercraft, etc, not large companies like Kay's or Ratio (although even Ratio are a pretty small concern). If Ian Kirk can profitably produce beautifully detailed work why can't our people do the same? And where is etched brass kit manufacture in this country? Surely a simpler way of producing a quality product, which is robust, easy to assemble, and highly detailed, just does not exist.

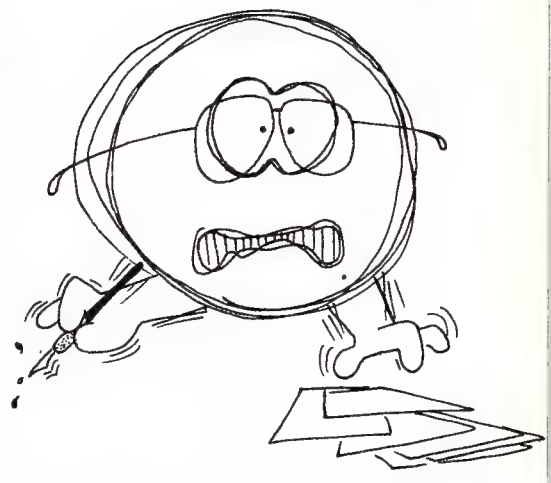
On top of the appalling quality of our kits is the even worse problem of badly written, often incomprehensible, instruction sheets. Lack of detailed drawings, or even rough drawings sometimes, and almost non-existent prototype information, or references as to where you might find it, is a common problem. There is nothing better designed to put a novice (and even and advanced modeller) off than lack of information, leading to frustration and disappointment.

No, respectfully, Sir, the arguments put forward by you no longer hold water. Gone are the days when one had to attack a white-metal kit with a sledge hammer in order to make it fit. The market is there, in order to take advantage of that market our manufacturers **must** begin to produce kits of quality, using the techniques that have been devised by the Brits and the Yanks, ideally suited to our "backyard" producers; kits that will rival the commercially produced, often inaccurate, ready to run stuff, help to expand the market, rather than deplete it. It isn't hard, and the sooner we stop making excuses and start some positive criticism the better off we'll all be.

I. A. Walker,
Longueville, NSW 2066.

Sir,

First I must congratulate you and your staff on a most excellent and informative magazine and for



reaching 100 issues. The colour section was most enjoyable and I hope it can continue in future issues, even if it is only, say, every third issue.

I must voice my very strong disapproval of the letter written to Mailbag by Mr Mark Hendy concerning MRC/Friedmont and PMH. His remarks were most uncalled for and must be, I feel, due to one of two factors:-

1. Mr Hendy is incapable of producing a finished model from these kits, or
2. He is such a good modeller he can scratchbuild all his rolling stock himself and he has unlimited finances.

To a family man on a basic wage where funds for his hobby are very limited I find, and have found over the past few years, these MRC/Friedmont kits well within my budget. I must admit they require some skill and patience to obtain a finished product which is acceptable. I gain a great deal of self satisfaction when I take a basic kit and, after seeking out the prototype on the PTC rails, photographing and taking details of it, finally adding all the little extras (floor detail, etc), can come up with a car or wagon which is acceptable to the average modeller.

I ask Mr Hendy in all sincerity where would we be now without these local manufacturers of cheap kits and bogies? I suppose Mr Hendy would rather buy custom made brass rolling stock or Lima IP sets!

I am sure I speak for many modellers who wish MRC/Friedmont and PMH all the best for the future and hope they continue to give us models of our local trains, and don't let the words of one unkind individual dampen their spirits. Anyone who has just finished a TAM or VHO kit will know what I mean when I say keep up the models MRC, they are improving all the time.

James Whitfield,
Tahmoor, NSW 2573.

Sir,

Three cheers for Mark Hendy's letter in the last issue of AMRM. As a modeller in NSW HO I concur with all the points in his letter, I wish I could be as enthusiastic about AMRM's reply, as is usual with this sort of debate in these columns the editor's reply is twice as long as the 'offending' letter and seems to miss the point entirely.

There is a regrettable tenor running through this hobby, it can be found in this magazine, hobby shops and exhibitions, it has got to do with standards. It seems that nobody is to be allowed to criticise any aspect of the hobby without running the risk of being called a 'knocker', that is of course excepting the review section of this magazine where anything goes. Frankly, I am sick and tired of this attitude. It is time responsible bodies like your excellent magazine became a little more even handed. It seems that it is OK for the magazine to heavily criticise poorly produced brass models from Japan (quite rightly I must add) but a different matter for an experienced correspondent to apply those same critical standards to a sloppily produced kit from a local manufacturer.

My experience at exhibitions is similar in nature, to take last years' showing at the Sydney Showground as an example. I feel, and I know a lot of people who agree with me, that this should be THE exhibition, ideally showing the best there is to offer in the railway modelling field. If this means you only end up with a dozen exhibits, fine. If people want to exhibit yet another Marklin or Tri-ang layout with outrageous grades, curves and speeds then let them do it at one of the many suburban exhibitions. The major Sydney show should have only the top exhibits. When I voiced my feelings about this at last years' exhibition I received the usual knee jerk reaction from the official in charge and was told 'the kids like it' and

'the more exhibits we can fit in the more money we make! I am not unsympathetic about the financial and organisational problems involved in these matters but the line has to be drawn somewhere. The public are not fools, as witness their excellent selection over the years of the best exhibit, and kids get just as big a buzz out of the better exhibits than they do out of the sloppy ones. More is not better and size has nothing to do with quality. The suggestion by the editor in last months magazine (following the apologia for second rate products) is an excellent one. Exhibited layouts should carry an official exhibition notice stating aim of exhibit, stage reached and other appropriate information. This would help quell remarks like 'oh look, they forgot to put the grass in', heard constantly at these gatherings.

If the hobby is to be strong and worthwhile, criticism should be allowed to reign freely and AMRM is the ideal avenue for it. A great deal of what has been said in these columns over the years has been accurate (if a trifle raw at times) unfortunately it seems that this magazine has tried to draw the teeth of this comment, whilst giving full vent to its own opinions in the review section. It is time these double standards ceased.

James McCarthy,
Roseville, NSW 2066.

Sir,

I feel I must respond to Mr Hendy's letter in the Jan/Feb issue of the magazine even though the Editor has done so admirably.

I am a beginner in the hobby and not ashamed to admit that my expectations are nowhere near the very high standard projected by Mr Hendy. I admire perfectionists, indeed the hobby needs them, but it will be many years yet before I reach that level of skill. In the meantime, I need access to a market which supplies products at my level of skill, air bubbles, tackiness, warts and all.

Mr Hendy has failed to acknowledge, and the Editor has pointed out that there is a range of needs within a total market. I intend to continue to use Friedmont and MRC kits as long as they are available, despite their "third rateness".

Perhaps Mr Hendy need not worry about third rate models — some of the prototype looks very much third rate too!

S. D. Holt,
Flynn, ACT, 2615.

The above letters show different viewpoints on the same theme. Editorial comment in AMRM NEWS. — ED.

Sir,

I am rather annoyed that AMRM has ceased publishing Exhibition dates. I use the advanced notification of these exhibitions to make employment leave applications to enable me to attend same, and not having the information I find myself missing an important part of the hobby. I strongly request that the exhibitions section be put back into AMRM.

John Roberts,
Orange, NSW.

AMRM is still very keen to publish the dates of exhibitions but we require notification of the same dates from exhibition organisers, who do not seem interested in supplying them. — EDITOR.

Sir,

May I take this opportunity, while I have pen in hand changing my address, to congratulate you on your 100th issue. Even though I've only been reading AMRM for one fifth of the time its been in print I admit it has been a great help over the years. Thank you.

Kent Smiley,
West Footscray, 3012.

Sir,

Do you know of anyone out here who is involved in modelling — by out here I mean Bourke or surrounds?

Michael Seccombe,
Bourke, 2840.

If anyone does live near Bourke and wants to contact Michael please write to AMRM for his address. — ED.

Sir,

The review of the 'N' gauge rolling stock kits which appeared in the September/October 1979 magazine mentions that the MHG series goods brake vans ride on 2AT bogies, and implies that the use of Bettendorf running gear under these vehicles is incorrect. This is not the case: all 200 MHG vans were fitted with conventional three-piece 'ride control' bogies when constructed in the early 1950's, and it was not until the mid-1960's that replacement trucks of the 2AT pattern commenced to be fitted. There is at least one MHG van extant which has the old bogies, and indeed the original body styling.

The model shown in the Reviews photograph illustrates an MHG van in original body condition, and is accordingly far more correctly operated with "Bettendorf" style bogies than the 2AT design.

Paul Rogers,
Flynn, ACT 2615.

Sir,

Might I be permitted to convey to you and all the members of your staff my congratulations on the publication of the 100th issue. As I have a copy of each issue as it was published I have noted with pleasure how the quality of the publication has improved over the years and in particular over the last few. AMRM is now the equal of the professionally produced US & UK publications but to me is superior because it features articles that I know a little about — The local scene.

Since the first issue in April, 1963, the magazine has been my means of keeping informed of what is going on in the hobby by way of your market reviews, etc, and this enables me to keep up to date with not only new products but new manufacturers. By carefully reading the advertisements I have been able to acquire many bits and pieces which will all have a place on my layout.

Not being a scratch builder but a kitbasher I have made contacts through the columns of your magazine with many modellers whose friendship I value highly. What, in 1963, I set out to achieve in the hobby as an impossible dream is now becoming a reality and when completed may, with your permission, warrant an inclusion in your magazine.

Neil R. Cram,
Penrith, NSW 2750.

AMRM NEWS

One Thousand Reasons

Yes, last issue, No 100, there were one thousand reasons to complain about AMRM for all subscribers received their copies at least one full week after the magazine had been released. There were two reasons; one on our part and one on the part of our distribution agent. Our problem was caused by an attempt to get all late renewers and address changes onto the files, and our distribution agent's reason could only be put down to slackness. To overcome future reoccurrences of the same problems we have gained an assurance from our distribution agent, and will keep a closer check on him. And in the future the subscription renewals and address changes will DEFINITELY close on the first day of the first month of each issue i.e. for the March/April issue the closure date will be the first of March, for the May/June issue the closure date will be the first of May. If you are ONE day late you will miss an issue.

We hope all subscribers will forgive us for the late delivery of last issue, and that late renewers do so ON TIME next time.

Once again . . .

Once again the great debate is on. Once again Australian manufacturers (some unjustly) have been damned for their attitude to the modelling public. Once again AMRM has been accused of taking the side of the manufacturers and making excuses for them, as well as being charged with failing to carry out our DUTY to constantly criticise some manufacturers for their supposedly bad products.

So let us get a few facts straight before making comment on the current issue.

i. As long as the Australian outline section of the model railway hobby has been specially provided for by local manufacturers there have been complaints, some justly others wrongly. To collectively group all manufacturers together and accuse them all of producing all their models poorly is an indication that either the accuser has a clouded view of the subject or lack of relevant details of those models being marketed.

ii. AMRM does not set out or try to make or find excuses for manufacturers, nor does it take sides on the debate. However, AMRM does strive to find out the reasons behind many of the problems and, accordingly, report them to readers so that they (the readers) can form their own opinions. Readers are therefore urged to read ALL the comment made on any subject and consider it ALL before reacting.

iii. Does AMRM or any other individual have the right to criticise just for the sake of criticism? AMRM in its REVIEWS and AMRM NEWS sections will strive to constructively criticise a product upon the merit of the individual product. Manufacturers and readers can then draw their own conclusion on the matter. In the case of the reader, the choice of whether to purchase the product or not can be made, and in the case of the manufacturer the criticism can either be accepted and used to improve further products or rejected out of hand. AMRM does not intend to take the attitude of the daily press and ram a viewpoint down the throats of the individuals.

Now for the debate . . .

One thing that can be said about the current debate on the standard of Australian models is that the criticism is not new. What is new, however, is that a large number of the critics have decided to criticise (of a number of manufacturers) ALL kits collectively, claiming that they are ALL of poor quality. In all fairness this is not really the case. Therefore, the criticism tends to lose credibility. Another new aspect is that at least some individuals have started to suggest what requirements some modellers want. I. A. Walker, in his letter, suggests some production methods that can produce good quality models. All we need now is for a manufacturer to utilise such methods.

The sad aspect of the current (and for that matter all past) criticism is that the manufacturer has the choice to either accept or reject the comments. Appearances indicate that the criticisms are rejected, for the kits continue, to the same standard. *But they sell!* Thus it is perfectly logical for a manufacturer to continue to supply a market demand if that market is there.

Acknowledging the fact, then, that the kits in question are selling and the manufacturer is continuing to stock the hobby shop we must recognise that there *is* a market for the kits, whether or not selective modellers wish it. It is interesting to reflect back a few years to the VR scene where plastic kits of dubious accuracy were made available, but did not sell all that well. The production of these kits ceased. From this we can draw a conclusion that the absence of a demanding market will reduce the availability of the models. This is solely in the hands of the buying public, and must be analysed by one and all to find the reason why some modellers are dissatisfied.

If we can conclude that the present local manufacturers are not looking at new manufacturing techniques (and this is not true), then it seems to reason that if we are to get the so called better standard kit we need new manufacturers. For the purpose of debate

may it be suggested that we do the following:—

i. constructively criticise a product (note the singular), pointing out where it does not meet one's standard;

ii. refrain from purchasing said product regardless, supplementing it with a competitor's product or one made by one's self;

iii. consider the possibility that better quality products could be made to one's standard by alternative methods, and put one's money and effort into producing such products so that we all can enjoy them;

iv. failing all else, revert back to being a scratchbuilder, where one has only one's self to criticise for a poor model.

AMRM invites readers to express their views on this subject for the next TWO issues, but requests that the comments be of specific models or brands (individually) and that some aspect of standard requirement be shown. We would also like to hear, in writing, from readers explaining why modellers have the right to demand what a manufacturer produces.

In concluding "comment on kits v poor standard" for this issue, a comment once made by a manufacturer of quality Australian kits bears repeating. In his view the Australian market was big enough for all current and many future manufacturers. He believed that there was a valid market for good, average and poor quality models by the many differing manufacturing methods. Additionally, he was convinced that the Australian market could be grouped into at least three, possibly more, levels of modelling standard. AMRM will always strive for a higher standard in models, and will continue to keep this aspect before manufacturers by way of constructive criticism, not whinging.

Empty Museum

AMRM readers who are also members of the New South Wales Rail Transport Museum should by now be aware that the museum is undergoing a period of review, where the future of the museum, its activities and exhibits are being considered and, with regard to the exhibits, there is a plan afoot, if fully carried out, to more or less deplete the museum of a large number of the present items, including locos, carriages, wagons, etc. This magazine does not intend to suggest which way each NSWRTM member should vote, when the time comes, but we do urge all NSWRTM members to become fully aware of all the aspects of the revision plan. Read the report that was sent to all members and voice your view in person or by proxy. The issue is important, and should be given the utmost attention by members.

In the event of the full revision plan, as outlined in the report, being implemented, we at AMRM urge the NSWRTM general committee to adequately record in photographic form, all the vehicles to be disposed of, prior to disposal. Who knows, it could end up being a revenue earning service to modellers who seek such information. If we cannot visit the museum to see our favourite loco, at least we MAY be able to obtain photographs of the respective vehicle.

Duplications . . . Why Not?

A few readers, in response to the appeal in AMRM news last issue for no duplications, have written in suggesting that duplication of models by different manufacturers would be good competition and eventally eliminate some of the poorly produced kits now on the Australian market. The point is realistic and maybe competition would achieve the eventual objective indicated. The appeal however (unfortunately for it became a little vague) was aimed above the small low run kit producer and aimed at the market where preparation for production is expensive. We are niave enough to hope that any manufacturer who attempts to produce models/kits by injection moulding or metal casting would ensure that the final product was of high quality, and it would seem unrealistic for two manufacturers to produce, say, a VR D3 kit within a few months of each other, for the chances are that neither manufacturer would get a return on his money. In the long term there is no doubt that there will be sufficient market demand to enable duplication of models/kits, but it does not seem that it would be viable at the present time.

Correct Spelling

Here at AMRM we have a continuing problem ensuring that all spelling and grammar is as correct as possible to ward off our detractors (note the word knocker was not used) but every now and again we miss out. Well last issue we made the unforgivable error of spelling a christian name incorrectly. Well to correct the matter we will, when covering his layout in more detail in a future issue of AMRM spell your name correctly, BRYAN.

Price Increase

Observant readers will have noted that this issue cost a little more than usual, in fact the cover price for the Australian MODEL RAILWAY Magazine has increased to $1.00, the first rise in two years. The reason is not due to last issue but completely caused by the general increase in inflation plus the recent sudden rise in paper and the expected high increase in printing cost caused by the recent gold/silver boom.

Knockers

What is the definition of a 'knocker'? James McCarthy in his letter in MAILBAG this issue brings to the fore a word that has and can be used to describe an individual or organisation who criticises a subject matter. For once we at AMRM are not going to take the lead to describe the difference between 'knocking' and 'criticising' but will leave it to our many informed readers who are well versed on the subject.

Commercial News

Further to our comments in AMRM NEWS last issue re Cavalcade Wheels, its does seem that everything was not as 'cut and dried' as it seemed, for we have had numerous calls and letters from hobbyshops who hastily refute the claim that they would not stock the products, the same people pointing out that large outstanding orders were not fulfilled, phone calls promising delivery were not met or explained and at least one who claimed that the quality of the product was not good enough. From the response from the hobby-shops it is clear that all the aspects of the problem were not conveyed to AMRM when the original comment was made.

"When one door closes another opens" is a well used phrase in the English language and it appears that this will be the case with wheelsets soon. Modellers of Australian prototype lamented when it was learned that Cavalcade Wheels were being withdrawn from the market, for while some of the wheels were of rather poor quality, they could be cleaned-up and they were 10.5 mm spoked, just like the prototype, and as the wheelsets by Bergs and MGW were no longer available Cavalcade were our last hope. Well, the door that is closing behind Cavalcade is opening up at least threefold in Sydney giving modellers a wide choice of products. Mansfields Hobbies is selling 10.5 mm metal spoked and disc wheels with pinpoint axles that should fit Lima and PMH bogies; Keith Hudson's and Punchbowl Hobbies are selling a 10.5 mm wheel spoked; and Australian Model Craft outlets around Australia will soon be able to supply a locally made 10.5 mm spoked wheel of high quality. Further comment on the wheelsets will be made in the REVIEW section as soon as possible. From the samples we have seen we feel that here again is another fine product for the Australian market, which is up to world standard, and should give the whingers little room to complain.

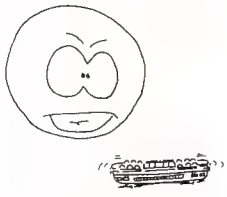
NSW modellers will soon be able to build a Z20 class kit, when INDI Industries release their Z20 class locomotive kit. The kit, in HO scale, will be made by the low melt casting process and only the motor will be imported. To be marketed by the Australian Model Craft dealers when produced, some detail items, to be sold separately, will soon be available.

Ray Pilgrim, flushed from the success of the first run of Z26 class locomotive kits, is to supply more to the market. The body of the kit is produced by the chemical etching process, and as such is expensive, due to the related high cost of chemical etching in Australia. While a full review of the kit should appear next issue, we encourage interested parties to make enquiries now, for this is the style of project that can disappear from the market due to the lack of interest. It is pointless lamenting later of the disappearance of the kit if initial interest is insufficient to retain the manufacturer's interest.

Word is to hand that more Workshop Five kits will filter through soon. See advert this issue.

Prototype Model Products are re-releasing some of their rolling stock kit range at some Sydney suburban shops. The 'S' wagon and 'BDX' are two, and the BHG, made from new moulds will add to the available NSW type kits on the market.

Friedmont Models are planning to release the VR Spirit of Progress cars in the near future.



"All right — Who 'BAYGON'ed the N gauge"

Insurance

Over the past few years the merits of insuring one's model railway layout and/or equipment has featured in just about every hobby magazine, this one included.

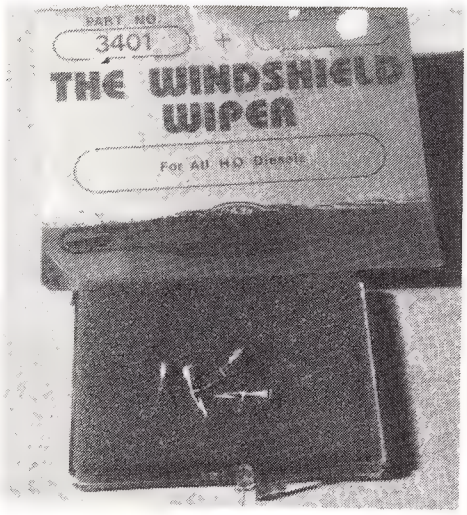
We have recently received correspondence from a Perth-based company advising of its proposal to formulate an insurance package deal especially for model equipment and the like. Naturally, this is a new venture, and the company is interested to know of the various requirements, coverage values, etc. that we, the modellers, are likely to be needing.

The magazine appreciates the company's endeavour to assist in this field, and invites interested readers to contribute his or her thoughts and suggestions by writing direct to:—

Mr A. G. Pinnegar,
Caravan Industrial Life Brokerage (WA) Pty Ltd,
Post Office Box 472,
WEST PERTH 6005.

Editor

REVIEWS



The Windshield Wiper in HO scale by GSB Rail. Sample supplied by McBees Hobby Centre, PO Box 144, Coburg. 3058. Price $2.10.

Modern image model railroaders are benefiting from the current crop of manufacturers supplying detail items, for a major section of special detail that is becoming available is specifically aimed at the diesel. This magazine has already reviewed some of the vent and bits that adorn the beloved diesel (what happened to all those who prophesised the dearth of the model railway hobby with the demise of the steam engine?). The windscreen wipers under review are supplied as metal castings, four to a plastic box. They are well packaged against damage. The wiper assembly is joined onto part of a metal sprue, that can be removed by filing. The wiper is attached to the diesel (or truck/car) by drilling a No 76 hole into the correct position and gluing. The wiper blade is 4 mm long (a little short for the Renault in the garage) and the sharply cast detail would enhance any diesel.

Bob Gallagher.

NSWGR LLV or GLV bogie louvre van kit in white metal. Imported by Bergs Hobbies from New Zealand. Available only from Bergs Hobbies. Price $13.65, less bogies.

This is one of two new items of rolling stock imported from New Zealand by Bergs Hobbies and we are told that more are to come.

The kits consist of a basic four piece kit in white metal (two sides and two ends) with two pieces of aluminium sheet for the floor and roof. A bag of underbody detailing castings completes the kit.

The casting quality and detail on this model is amongst the best I have seen on a white metal kit and the cast on hinges, louvre detail etc are superb.

The castings are free from flash and require only minor filing and cleaning up before assembly.

The dimensions of the castings are very accurate and, more importantly in the case of the sides, are consistent. After assembling four of the kits I have not found any variance in dimensions to speak of.

I put the kit together using superglue and five minute epoxy and found the instruction sheet to be quite adequate. The kit has an accurate scale plan included which is most helpful.

I assembled the sides and ends first to get the basic box, making sure it was square and level. The ends have cast on lugs which make this step easy.

I did not like the aluminium floor sheet and so I made a new floor from 3 ply. I also felt that interior bracing was needed to prevent the sides being bowed from pressure when being picked up so I superglued a length of brass channel to each side and then soldered cross pieces to the channels. This had the added effect of making the side castings perfectly straight.

The major criticism I have of this kit lies with the roof. A flat sheet of aluminium is supplied and the modeller is expected to shape this to the roof-line, a task I found to be almost impossible.

Fortunately relief was close at hand in the shape of an old venetian blind slat which proved ideal and in fact was so successful it will be used on future scratchbuilding projects.

The natural curve of the slat is almost perfect for the roof and is easily glued in place with five minute epoxy. It is then trimmed and filed to fit flush with the sides and ends.

The roof does need bracing along its length to prevent sagging and I used some scrap timber for this. (In fact I used the surplus floor sheet to sit just below the top of the sides and then used this to support a longitudinal timber piece resting on the old floor piece to support the centre of the roof. This worked ideally and I have had no roof sag.)

Bolsters and underbody detail is added next, again the castings are of excellent quality.

Bogies have to be supplied. I used Bergs brass top hangers and Walthers Andrews trucks.

Coupler pockets are provided and need only small adjustments with a needle file to get a good fit for Kadees.

I sprayed the models with automotive primer and then with a mixture of grimy black and brown and the finished model is most impressive.

One major drawback is the completed model's weight. This is about 7 ozs and with the suspect pulling power of many brass locos this will prove a problem especially if your layout has steep grades. Good, free rolling bogies are essential for this reason.

Overall a most impressive kit of a model which would be difficult to scratchbuild.

The outstanding detail and simplicity of construction make this kit a pleasure to build.

I hope this is the first of a range of such models and the weight problem is really the only major drawback I see with this otherwise superb model.

Ron Cunningham

Model 222 Power Pack, by Eda Electronics. Our sample supplied by Punchbowl Hobby Centre, 545 Chapel Road, Bankstown 2200. Price: $49.95.

The product under review is the Model 222 Power Pack, manufactured in Australia by Eda Electronics of Queensland.

The 222 is a complete ready to plug in control unit. It is a transformer/controller combined, and comes with 6' of mains power lead and a three pin plug attached. The crinkled black baked enamel case is 142 mm long, 100 mm wide and 65 mm deep. The < unit provides < tapings of: controlled 12 volts DC at 1.5 amps, uncontrolled 12 volts DC at 2 amps, and 17 volts AC at 1.6 amps, all via slotted screw terminals at the top end of the case (the mains power lead enters at the bottom end of the case).

The face place is aluminium, tastefully screened and painted black. It contains a linear slide switch (throttle) with marked calibrations, and a small forward/reverse (direction) switch, unfortunately with no centre OFF position. This switch is also mounted for vertical operation — a horizontal mounting would give a more visual indication of direction of train travel. The whole unit is possibly a bit cumbersome to be comfortably hand held, but then no more so than certain other brands of control units on the market. The 222 is fully solid state, and is protected from overloads by a thermal cut-out.

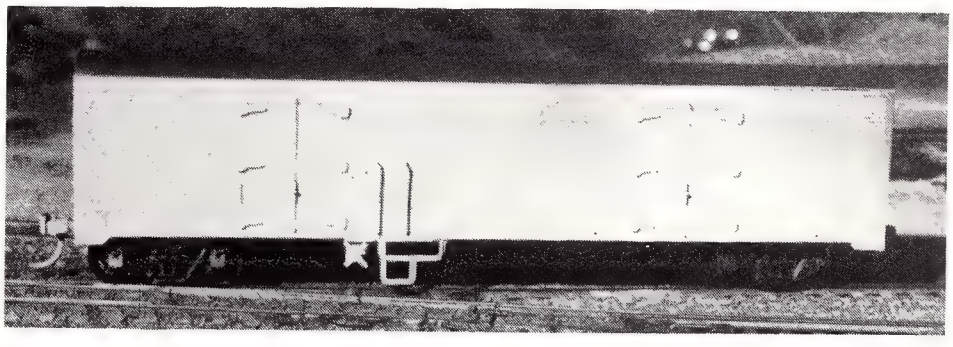
The unit was tested with just about all brands of locomotives, from the cheaper commercial brands to the heavy motored brass models (can motored units were also tested). I am pleased to say that the 222 operated faultlessly on all. I have always found Athearn locos to be heavy amperage drawers. The unit handled three Athearn locos, but shorted out with the fourth — more than what would normally be run on one controller anyway!

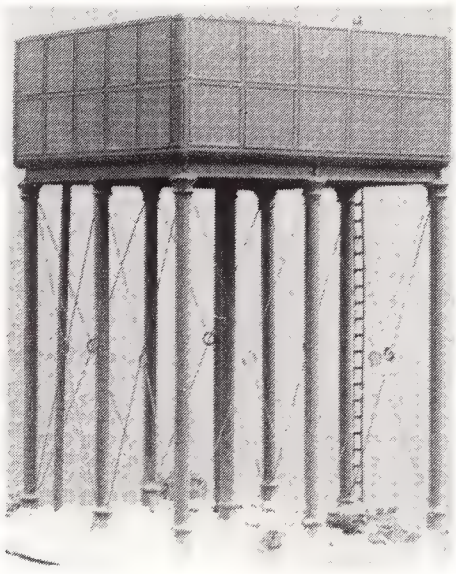
The slide throttle takes a bit of getting used to. It operates in a forward/back direction — forward (away from you) for OFF, back (towards you) for full power. In a panic situation I instinctively draw the lever **towards** me. Reflex action, which only time (and damaged locos) will correct!

I particularly like the response from the 222. It has a definite "feel" to it, something I have not noticed on any other controller. It responds immediately and progresses smoothly throughout the full length of the throttle switch travel.

With the direction of the forward/reverse switch being my only criticism (and the wrong way moving of the throttle my own fault), I have taken a particular liking to this unit and the performance it offers. It is a quality Australian product which, from overseas reports, is also admired by the Americans.

Allan Brown





South Australian Railways Cast Iron Water Tower Kit in HO scale by SARMOD. Sample supplied by McBees Hobby Centre, PO Box 144, Coburg, Vic 3059. Price: $12.50.

Printed upon the front of the box the kit is housed in is a warning 'This kit is definitely for the experienced modeller only', which in the final result proved to the reviewer to be an overstatement, for the kit was easy to assemble when the illustrated instruction leaflet was followed.

The kit is of a South Australian Railways cast iron water tower which was supported with tubular supports and diagonally braced with wire. The kit, of multi piece design, consists of epoxy castings (there being four sides, a tank base and a foundation casting), Plastruct (tubular legs), brass ladder, fine grain timber rods (to represent supply and delivery water pipes) and fishing line with plastic tube to be used to represent the diagonal bracing.

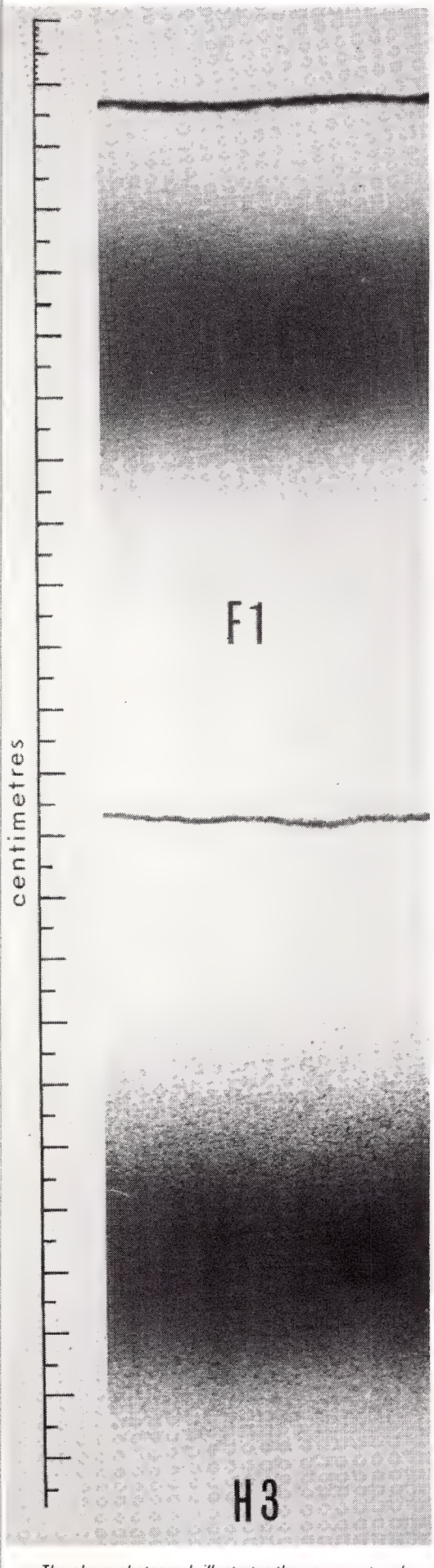
The castings are clean and needed only a little cleaning up prior to assembly. The tank floor needed straightening, which was accomplished by steaming over boiling water until pliable and then holding to a flat surface until the pliable state had stabilised. The legs (columns) were trimmed to size as instructed and the necessary grooves cut with a razor saw, the task taking a little time. The remainder of assembly was straightforward; however, the reviewer substituted 0.013 brass wire (Walthers) in lieu of the fishing line (having had the experience of using fishing line in a fence and seeing the fence one day become floppy, due to heat expansion and a few days later become too tight and pull out the fence posts due to shrinkage of the fishing line). The circular adornments on the wire bracing were added by slicing the plastic tube provided.

The unit has yet to be painted, but it will be necessary to apply the paint with an airbrush, for the fine detail on the tank side will be hidden if the paint is applied too heavily.

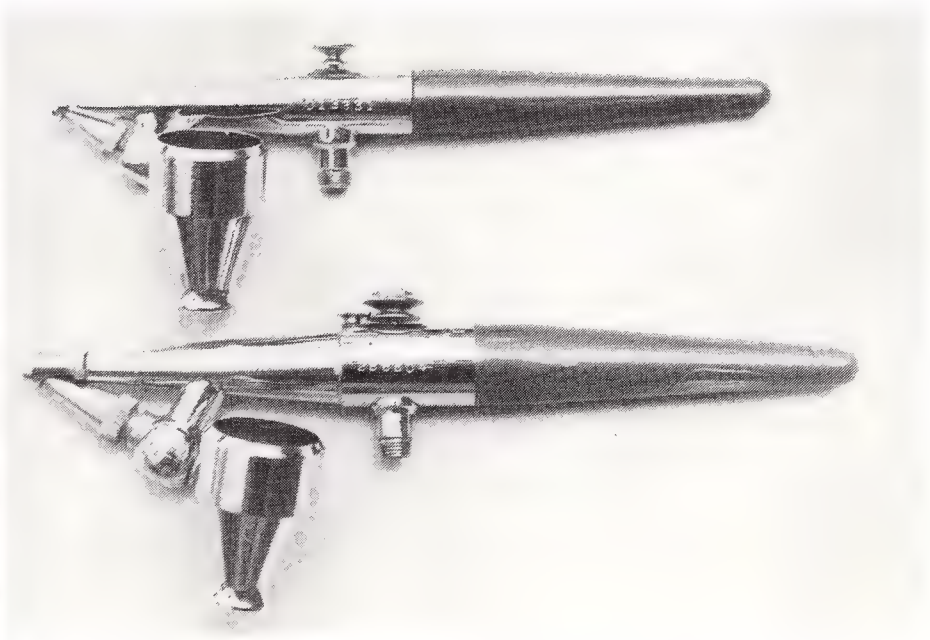
This fine model is not only to be enjoyed by the South Australian Modellers, for similar tanks, with steel 'H' or 'I' section columns, were used in NSW and although they would not be specifically accurate right down to the last rivet (which the kit does not have) the model would represent a high level water tank admirably. As initially indicated, this kit is not as

difficult as the manufacturer indicated, and could be assembled by any modeller who has successfully assembled any of the modular rolling stock kits on the Australian Market.

Bob Gallagher



The above photograph illustrates the narrowest and broadest bands produced by the respective brushes.



PAASCHE F1 airbrush (top) and PAASCHE H3 airbrush (bottom).

PAASCHE airbrushes. Samples supplied by the Australian distributors, Tricentrol Trading Pty Ltd, 16 Gorman St, Marrickville. Price: Type F1 $27.50; Type H1 $39.00.

Both airbrushes come in a plastic box, with a ¼oz colour cup, spanner. Allen Key, bench hangar, and a booklet on airbrush lessons. The braided hose, purchased separately for $7.00, is 2m long and terminates in a ¼" BSP fitting. Also available are a ½oz jar for the F1 and a 3oz jar for the H3.

These are versatile brushes which can be used with either the open colour cup supplied, or jars for larger amounts of paint. The open cup is ideal for small amounts of paint, or where different colours are to be blended into one another as in painting scenery. Both brushes are outside mix types with a needle control valve.

The H3 is supplied with a medium size needle and needle adjusting cone, but can be ordered or converted as an H1 to carry out finer work, or an H5 for heavier work. The medium nozzle handled both Floquil and the relatively thicker Humbrol equally well. Around the nozzle is an adjusting cone which alters the spray width, or, the amount of paint relative to the quantity of air. At its narrowest it will spray a line 0.75mm wide, from about 5mm away from the surface, and cover an area 30mm wide at its widest setting, from about 25cm away. A limit-stop screw, which limits the amount the operating button can be depressed, allows some control over the air flow.

The F1 is described as a suitable beginner's brush, and is supplied with a single nozzle size only. Though of a small size, it worked as well as the H3 with both Floquil and Humbrol. For best atomization the air supply must be at least 20 psi. The adjusting cone was quite delicate to adjust, and required only minute amounts of movement to adjust the spray width. There is no limit-stop to adjust the air flow as on the H3. With practice, however, the same effect can be achieved by carefully depressing the operating button only partway. The air hole in the lid of the paint jar blocked during first use, when paint was soaked up into the cardboard sealing disc. This was easily overcome by enlarging the hole in the cardboard. Spray widths varied from 1mm, made with the brush 5mm away from the surface, to 25mm from about 10cm away.

The colour cups and jars are push fits onto both brushes, though they are not interchangeable between brush types. The cups twist around to allow each brush to be used up to a near vertical position without spilling, but they do not allow them to be depressed much below horizontal. These are robustly designed brushes, that are easy to clean, and perform well.

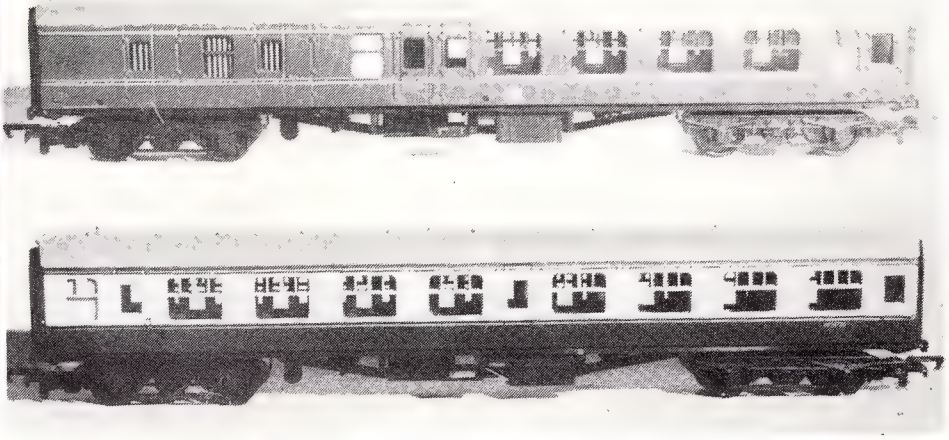
Ross Hurley

Mainline BR passenger coaches, samples from Hobby Dynamics Pty Ltd. Price: $10.06.

The models represent the BR Mark I coach in a 2nd class version and brake/2nd style. Such coaches have seen service over much of the British Railways' system since the 1950's. A variety of colour schemes have been applied to these carriages in the last 20 years and most appear in the Mainline range.

The 2nd class coach was in the carmine and crimson colour scheme (sometimes referred to as blood and custard) and lettered for the Western Region. The brake/2nd was in the BR maroon and lettered for the Midland Region.

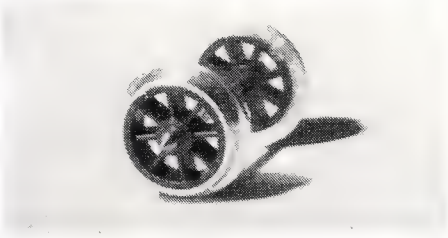
Both models showed interior and underbody detail to the standards one expects today. The lining and lettering was neat and appropriate to the colour schemes depicted. The only real criticism is the position of the body mounting lugs. Unfortunately they are rather prominently located in the body side and this spoils the overall appearance. Perhaps they could be touched up to match the colour scheme of the body if one is careful.



Some wheels in the bogies were found to wobble but the plastic wheels could be replaced if necessary.

These are very useful models for a British layout and have many applications behind steam, diesel or electric locomotives!

Graham Ahern



10.5mm spoked wheelsets, in 16.5mm gauge. Manufactured by INDI Enterprises Pty Ltd and distributed by Australian Model Craft, PO Box 415, Albury, 2640. Price: $1.50 per two axles and bearings.

The demand in Australia for 10.5mm wheels, spoked or disc, is great for the Australian railway systems used three foot diameter wheels in most circumstances. Conveyed to HO scale the wheel size is 10.5mm. The wheel set under review is a 10.5mm × 8 spoke wheel. The tyre is nickel silver, the pin-point axle is made from stainless steel (non magnetic and won't rust), and the spokes are plastic. The wheel is to AMRA standards which differs slightly to NMRA in that the flange and wheel profile is flatter. Wheel width is 3mm while, the tyre width is 2mm wide. The flange is 0.9mm while pinpoint to pinpoint the axle is 25.9mm long. Axle diameter is 1.6mm and the tyre thickness is 0.4mm. Wheels are square on the axle and run true.

The four bearings accompanying the wheelsets are polystyrene, 2.5mm in diameter and 2.8mm deep. The pinpoint bearing is a little too close to the surface which, if used on fourwheelers, would require that the axle journals be too far apart.

The wheels have a glossy appearance, much like those once available through Berg's Hobbies. Overall, the manufacturing standard is first class and no comment could be made to illustrate any imperfection. The 14.5mm back-to-back measurement will enable the wheels to be used on most of the commonly used track systems as well as the final scale hand made trackage.

A top quality product, proudly Australian.

Bob Gallagher

NSWGR 'D53' class standard goods locomotive kit in HO scale by FSM, PO Box 169, Forestville, 2087. Price: $124.00 (With either Wampu or Turret tender).

The D53 was a modification of the D50 class (T524). Introduced in 1912, the first engine was built by Clyde Engineering and was introduced as the TF(939) class. As introduced, a tapered boiler and Allen straight link motion was standard. Eventually 190 units were in service in NSW, Clyde building 160 units and Eveleigh Workshops 30 units. The D53 (recoded in the 1923 recoding) was the first numerically large class to be fitted with superheaters, and as such were for a period a troublesome class of locomotive. The Wampu tender was originally coupled to all units but, in later life, when the class had been heavily modified with standard (parallel) boilers and numerous other physical differences, the standard goods turret tender was found in common use.

The kit is representative of the D53 as was seen in later life, with parallel boiler, and can be purchased with either the Wampu or Standard Goods Turret tenders, and either Allan straight link crosshead or the Alligator crosshead, providing the choice is made upon ordering.

The kit comes well packaged with the small items packed separately for protection against loss and damage. The kit is multi-piece and centrifugal cast in a low melt white metal. Many small castings are of the lost wax investment casting method. The component parts are clean of flash and the mould join marks are in most instances, easily removed. Detail items include the three different types of handrail supports and nickel silver side rods and crosshead slides. Wheels have been drilled and tapped and the thread does not penetrate through the wheel, allowing the respective screws to 'bite' home, and eliminating the possibility of coming loose by motion. Overall, the detail is clean and sharp, but the tender frame casting could be improved.

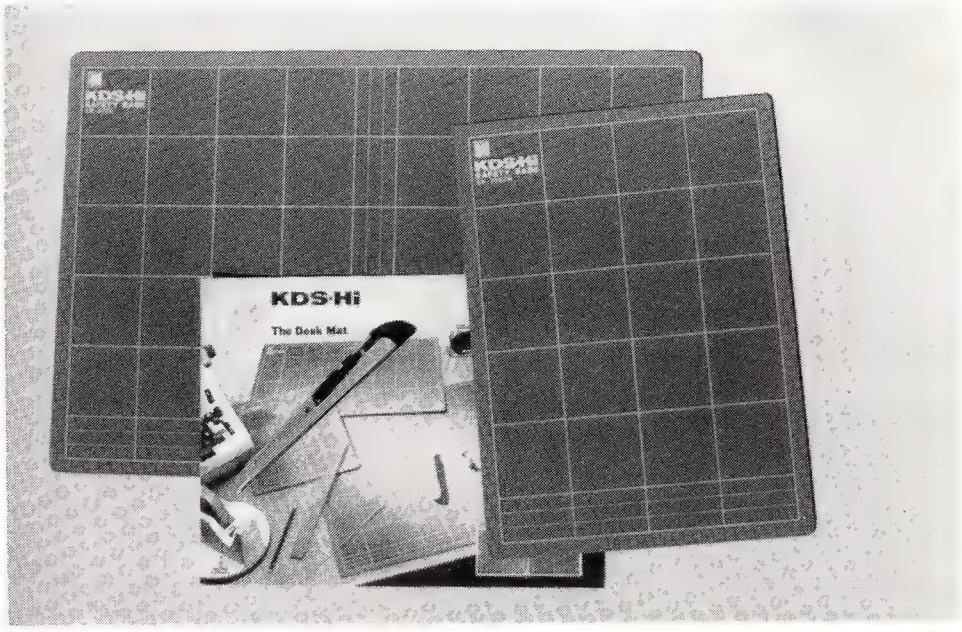
The assembly of the chassis is straightforward and easy using the Alligator crosshead, although the side rods need to be filed thinner for clearances. The method of 'blind' holes for crankpins is a decided advantage. Assembled, the chassis was very free running, and the combination of the ECM motor and the high gear ratio provides for smooth operation and responsive performance.

As indicated, the Turret tender frame could be improved but the detail on the sides and footplate front and rear is very good. The bogies are neat and well made. The loco body is well detailed and fits together well. Most parts only need a touch with a file for accurate fitment, and the provision of handrail stanchion location marks for drilling of holes is very helpful and remarkably accurate.

Summing up, this is a very nice kit that performed well without very much 'break-in'. Detail is good and, with the aid of photographs, can be finely detailed. Performance is very quiet. On the debit side there is the poor tender frame casting and the lack of coupler blocks. It seems reasonable that Kadee coupler mounting blocks could be provided under the locomotive footplate and some improvement to the tender coupler pocket; lugs for mounting the tender to the frame would be a decided advantage. The lengthy instruction sheet falls short for assembly of this kit, for the instruction sheet is a general sheet for all FSM locos and does not cover some of the special assembly techniques needed with the D53 kit.

In all a very nice locomotive kit, well up to standard.

Bill Clow.



KDS-Hi modelling tools. Samples supplied by A. S. Knight & Co Pty Ltd, Brisbane, the importers; for prices refer to the text.

The problem common to most forms of modelling must be that of a suitable working surface, particularly where cutting knives have to be used.

I believe KDS-Hi have solved this with their safety base. It is a laminated flexible desk mat using 1 mm layers of soft, hard, and hard PVC. The upper soft layer is embossed slightly, to increase grip on the work and its adhesion for paper suggests a static electric charge. The work surface is also marked with gridlines to assist layout, assembly etc.

Knife marks remain virtually invisible and the manufacturers state that "the mats can be used without any perceptible cut marks on the surface for a long time". I believe it from my tests.

The mats are available in two sizes at this time: SM-2000H is 450 mm × 300 mm and SS-1000H is 300 × 220 mm; recommended retail prices are $9.75 and $5.99 respectively. If nothing else it is cheap insurance for the dining room table.

Another product from this manufacturer is the Sigma safety knife. Whilst this retracting break-off blade type of knife follows a vast array of cheapies already on the market, do not dismiss it lightly. Like most second generation designs of modern gadgets, it has something to offer.

This high quality product has a lightweight sheet metal safety frame and utilises a simple but effective blade lock and pocket clip. Three blades are supplied, each with 12 break-off sections, and seem to be of a non-rusting material. They are extremely sharp and will certainly meet most modellers requirements.

With a recommended retail price of $1.59 they are better value than a scalpel, even if your uncle is a surgeon. It is a well-balanced tool. Comfortable and safe to use, and worthy of serious consideration, particularly for use by children.

Max Chaseling.

EASTERN SUBURBS RAILWAY by I. A. Brady, published by the Australian Railway Historical Society, New South Wales Division, PO Box E129, St James, 2000. Price: $3.60 plus post.

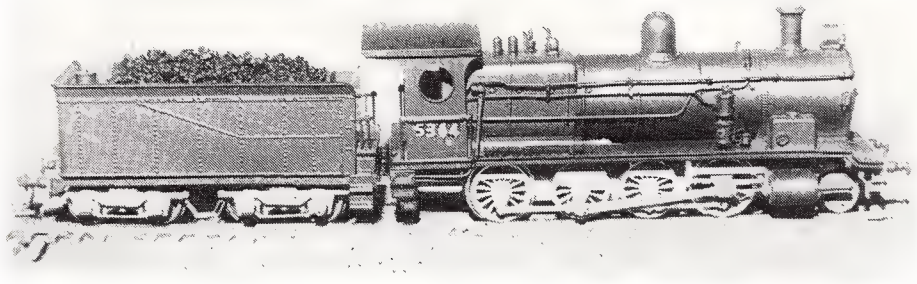
In essence this 60-page soft cover booklet is a political and economic survey of Sydney's Suburban Railways, with particular emphasis on the construction of the Eastern Suburbs Railway.

The author takes us back to the days when steam (trams that is) was king of the road and describes with the aid of maps, line drawings and photographs the slow growth of the Sydney suburban system, elaborating in detail the genesis and eventual completion of the line.

The many photographs that illustrate the booklet are, in themselves alone, a very interesting subject, for many of them depict Sydney in the day of the electric tram and double-decker bus, both of which will be history (in Sydney) very soon. Interest in this booklet is not restricted to railway enthusiasts, for the Eastern Suburbs Railway is a subject matter of interest to many Australians, and this booklet conveys the story very well.

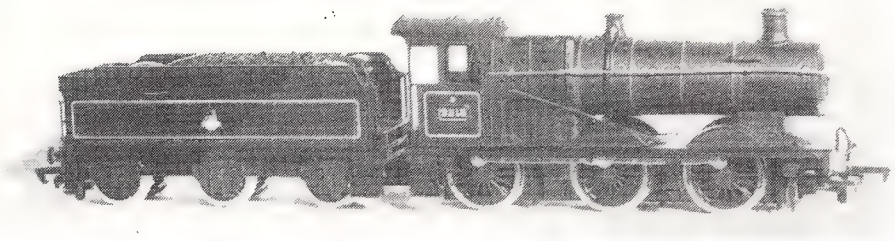
Attractively printed, well presented with fine black and white photography.

Bob Gallagher



Mainline GWR Collett locomotive, sample from Hobby Dynamics Pty Ltd. RRP $44.58.

The 2251 class 0-6-0 locomotive was designed by



C. B. Collett to replace a number of obsolete locomotives of that wheel arrangement on the Great Western Railway. First introduced in 1930, they proved versatile and popular locomotives and ultimately some 120 locomotives were built. One is preserved in operating condition and this locomotive has been the source of much information for the model.

The model comes in two colour schemes, unlined GWR green and in the lined BR black version. It represents the prototype in the faithful manner one has come to expect from Mainline with plenty of detail and separate fittings. It is pleasing to see such finely moulded rivets, particularly on the tender, and there is plenty of daylight under the boiler. As a consequence, the motor protrudes into the cab and interior cab detail cannot be provided, but this does not detract from the overall appearance. The rather large engine/tender coupling bar could be altered if desired.

The sample ran well with quite reasonable hauling capacity, and it deserves to be a very popular model as it fills a gap in the models available commercially of Great Western prototype.

G. B. Ahern

Electronic Controllers by Gaugemaster. Samples supplied by Gaugemaster Australia, PO Box 44, Turramurra. NSW. Price: Model U $47.00, Model 'UO' $55.00.

These controllers are panel mounted units, having a face plate 190mm × 75mm, with two mounting screws, and requiring a 155mm × 65mm cutout in the panel face. Built in the United Kingdom, they are designed to run off 18-16 volts AC, the rectification to DC being incorporated in the controller. Connection to both input, track power and uncontrolled power (12v DC) is via screw terminals on the rear of the controller. Each controller is equipped with a direction switch, simulator ON-OFF switch, a brake simulator knob, a speed control knob, a power indicating light and a track power light. Both models ('U' & 'UO') have similar appearances and are equipped with circuit breaker, and new units now have automatically resetting circuit breakers incorporated in the unit. The 'U' unit is rated at 1.5amp and designed for HO and N scale, and the 'UO' unit is rated at 2.5 amp and designed for heavy duty ie O scale. All tests were carried out on the 'U' unit and the 'UO' on HO/OO equipment including a Dockyard Garrett, Bergs D50 and 73 class, Athearn SW1500 and Hornby GWR Pannier tank.

On normal control the response and smoothness of the Gaugemaster could not be bettered for it handled all locos beautifully. Simulator used, however, was very restrictive in both speed and braking, the speed needed setting on full to attain any useful acceleration and the brake became fully effective on half brake. The slide switches for direction and simulator are a little cumbersome and lack a centre off position. The indicator lights were very useful for the green unit indicated power into the controller and the red unit glowed as track power became available, changing in intensity as the track power changes.

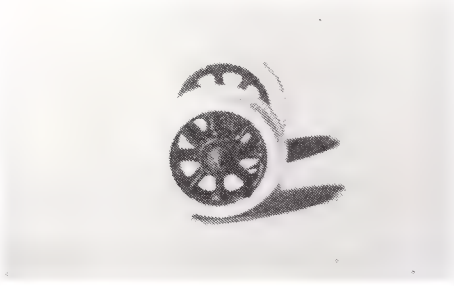
Despite the simulator the controller was found to be a good unit, doing the job expected, in that it smoothly controlled the acceleration of locomotives up and down the speed scale.

Bob Gallagher

HO scale corrugated metal by Keystone Locomotive Works. Sample supplied by Import Hobbies, 4 Windemere Court, Albany Creek, Qld 4035. Price: $2.10.

For anyone modelling the Australian scene, the importance of corrugated iron cannot be too greatly stressed, and the availability of another brand on the market gives the modeller a wider choice. The Keystone corrugated iron is different in that the method of packaging is unusual, for the five foot (1500mm) length of 31mm wide sheet is supplied rolled up inside a plastic box. It is made from 0.1mm material and, being so thin, is easily damaged, but for fine scale modelling the thickness is an advantage. The corrugations are 1mm apart making it a shade over 3" corrugations. A fine product, especially designed for the particular modeller.

Bob Gallagher



10.5mm spoked wheelset by North Yard Products in 16.5mm gauge. Sample obtained from Punchbowl Hobbies. Price: 40 cents per axle.

Manufactured in New Zealand this eight spoked wheelset is designed and manufactured for the discerning modeller, in that the wheelset is of high quality. The 10.5mm tyre is made from brass and is nickel plated, the spokes are injected moulded plastic, and are fitted to a 2mm diameter pinpointed axle. The wheel is 2.7mm wide, the tyre being 2.1mm and the rim is 0.6mm high and has a rounded appearance similar to the NMRA RP25 standard. The tyre is 1mm thick. Back to back measurement is 14.5mm and pinpoint to pinpoint the axle is 25.2mm long. The spokes are cleanly moulded and look realistic. Little else can be said about these wheels; they are good.

Bob Gallagher

Microsteam steam sound unit by Intrakit, 2457 Sudbury Ave, Ottawa. Ontario, Canada K2C 1L6. Price in text.

Sound systems are becoming the 'norm' in this day of the electronic chip. The unit under discussion is made in Canada by an AMRM reader and, comparing it with other units, it is different in that it can be installed in a HO loco (speaker and all) or in an N scale box car. The Microsteam MS-10 comprises a module 50mm × 13mm × 14.5mm which encapsulates the components having 9 wires protruding for connection. Also included is a number of resistors, a condensor and some insulation material, as well as a well detailed instruction leaflet.

The Microspeaker MS-1 is 14mm dia × 10mm thick. The assembly of the unit is straightforward, using a soldering iron, the only time-consuming part being the manufacture of the wiper blade (from supplied material) and the modification to the pickup wheel.

Basically the unit works when the pickup receives a voltage input; a steam sound (a 'chuff') is emitted from the speaker. The installer has the choice of having either 4 'chuffs' per wheel rotation or 2 'chuffs'. The modification to the wheel is the secret, where a cam effect can be produced by covering sections of the pickup wheel with a skin of epoxy, the instructions being explicite on the issue.

The sounds emitted are realistic, and as the system works off track voltage (12v dc) sounds are only emitted during operation. Acquisition of the system is only by mail order direct to Canada and the price in Canadian dollars is:- Microsteam MS-10 $34.95; Mircospeaker Ms-1 $5.95. Shipment by airmail at the cost of Intrakit.

An interesting product that will enliven your locomotive.

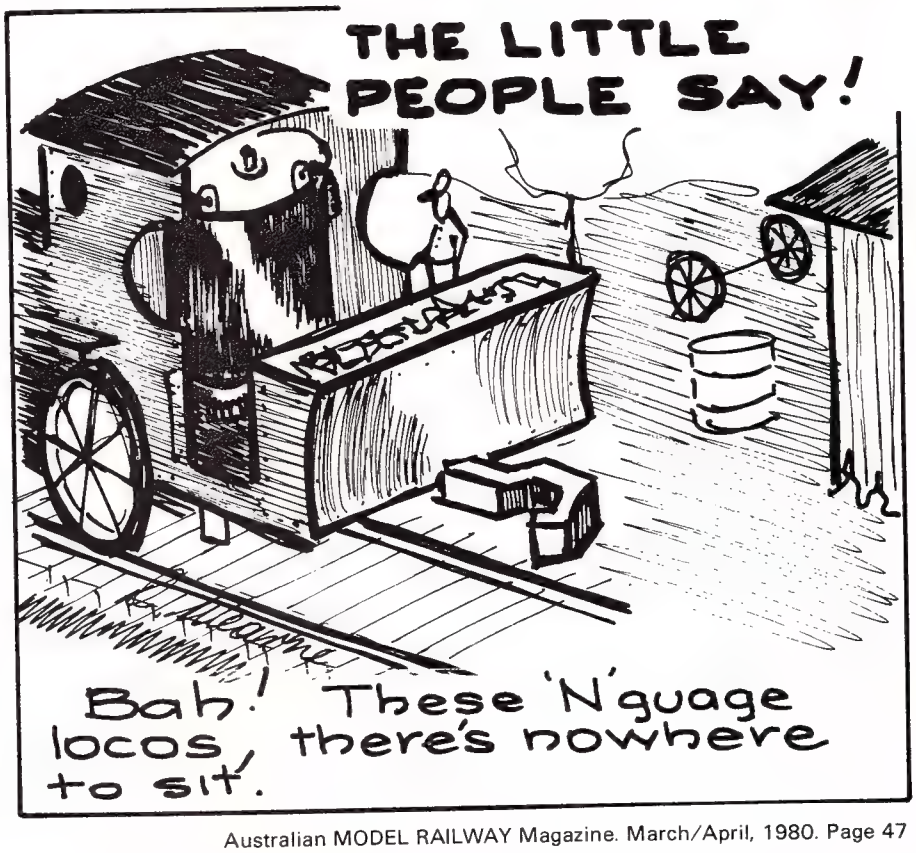
Bob Gallagher

THE WOLGAN VALLEY RAILWAY — ITS CONSTRUCTION by Henry Deane. Published by the Australian Railway Historical Society, New South Wales Division. PO Box E129 St James, 2000. Price: $2.00 plus post.

This 28 page soft cover booklet is a re-publication of the paper delivered by Henry Deane before the Sydney University Engineering Society in September 1910. Henry Deane was the Chief Constructional Engineer of the Wolgan Valley line and his paper covers the building of the line from survey to rail laying, including the interesting subject of locomotive (type) selection. The booklet is illustrated with some fine maps, showing overall area and track route and some of the many photographs included have not been published in recent years.

The booklet was edited by Allan Watson and Geoff Lillico, who no doubt are pleased to be associated with such an interesting book. As books go, it is not expensive to buy, but the quality of well set out type on glossy paper is present. A nicely presented book on a very interesting subject. The ARHS plan to publish a number of small books on the Shale Oil Railway subjects, this being the first.

Bob Gallagher.



NEW MODELS

Although AMRM is a model magazine many readers are interested in real trains and Evan Greer shares one of this recent sightings with us with the above photograph taken at Orange East Fork in January, 1980. 4701 heads a train delivering some of the new South Australian Suburban Transport Authority's rail cars. The first vehicle (00) is a driving trailer while the second vehicle (11) is a motor car. The driver compartment is housed in the elevated cabin.

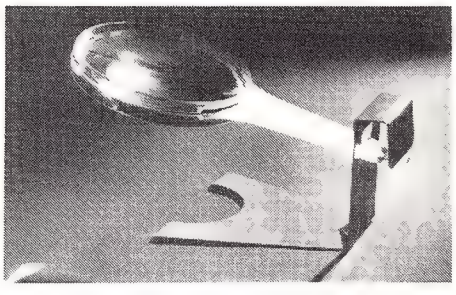
NEW MULTI-PURPOSE MAGNIFIER

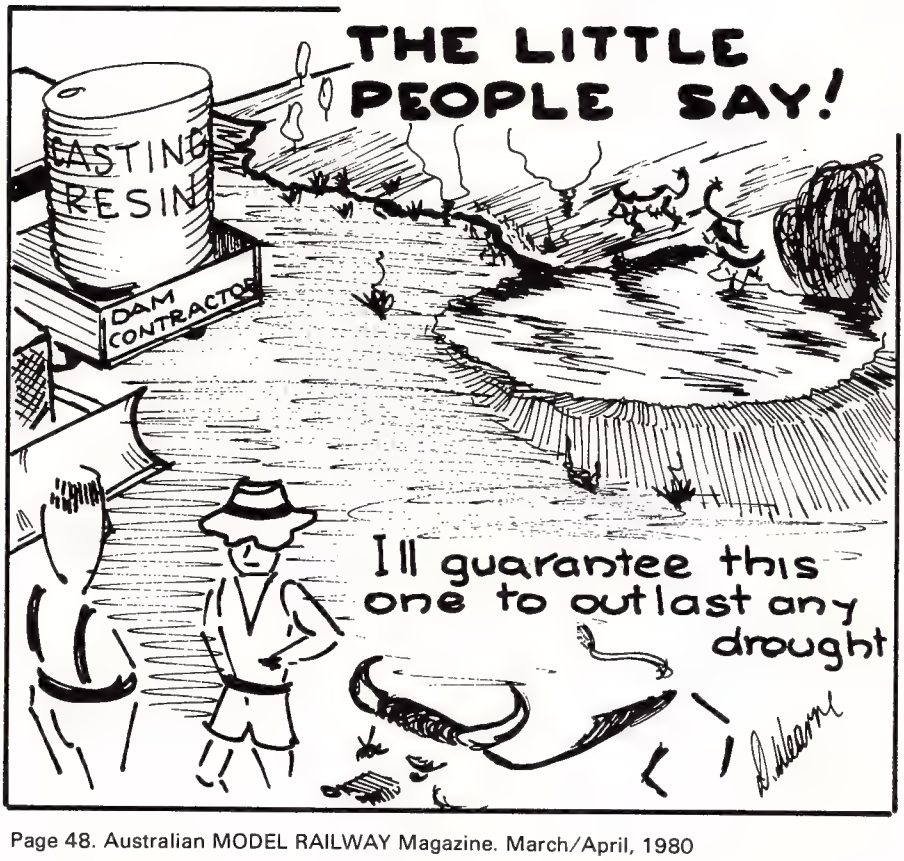
A new inexpensive but highly efficient magnifier is announced by Combined Optical Industries Ltd (200 Bath Road, Slough, England, SL1 4DW). Called the Handstand, it can be used as a hand-held magnifier or it may be inserted into a simple stand, leaving both hands free.

The lens, rim and handle are a single integral acrylic moulding which is shatter-resistant and has a better light-transmittance than glass. It has a diameter of 96mm permitting both eyes to be used to view the work. Magnification is about 2 times. Moulding to optical standards is a technology pioneered by COIL, whose products now range from ophthalmic (spectacle) lenses to optical systems for scientific instruments and aerospace equipment.

The supporting stand is a metal pressing with a non-toxic nylon-coated grey finish. The base lies flat on the table so that it does not get in the way. The upright has two slots. In the lower slot the lens is at the correct focal distance above work lying flat on the table; in the upper slot it is at the correct angle to view work held in the hands.

The COIL Handstand was specially designed for intricate repairs, delicate assembly, close inspection and similar work which would otherwise give rise to eye strain.





SOUTHERN CROSS MODEL RAILWAY ASSOCIATION

Secretary: Trevor Moore.
Membership Enquiries:
P.O. Box 84,
Miller. N.S.W. 2168.

DIVISIONAL REPRESENTATIVES:

Queensland:
Peter Kelly,
8 Moorhouse St.,
Bald Hills, 4036.
Ph: (07) 2611512

New South Wales:
George Giraldi,
322 Elizabeth Dr.,
Mt. Pritchard, 2170.
Ph: (02) 602 3117

Victoria:
Barry Moore
29 Robert Molyneux Drive,
Endeavour Hills 3802.
Ph (03) 700 2397

The Annual Membership fee for the SCMRA is $8 from March to February and $6 Joining Fee.

Membership entitles you to participate in the activities of the Association, to receive AMRM, and our newsheet Booster. Standards, Recommended Practices and Information Sheets covering model railway practice are included in the joining kit together with a vinyl ring binder and are also issued at regular intervals.

For further details write to the secretary or contact the divisional representative.

Meetings are usually organised on the second Saturday on each month in New South Wales, Victoria and Queensland. For further details and location please contact the divisional representative.

Victoria:
April 12: Meeting at Wessex Lines at Croydon.
May 10: Meeting at Laverton.

New South Wales:
April 12: Meeting and track laying demonstration at Rydalmere.
May 10: Meeting and Auction at Mt Pritchard.
June 7: Demonstration of wiring and throttles at Carlingford.

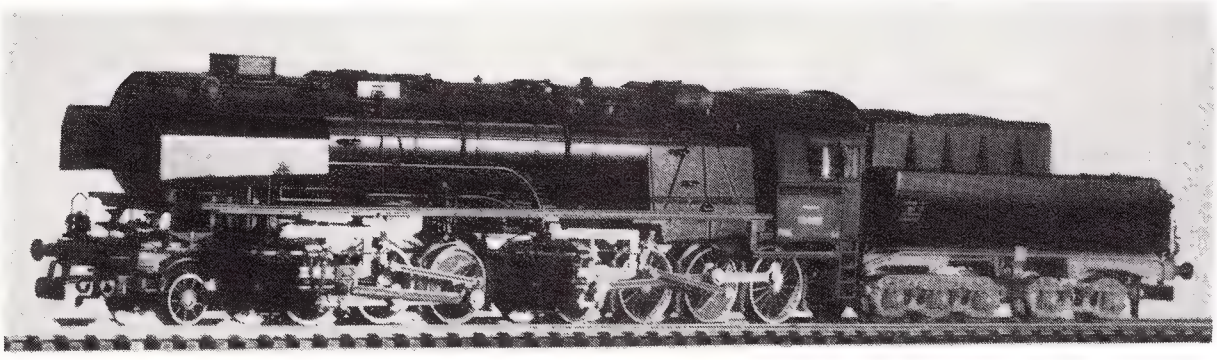
EXHIBITIONS

Castle Hill — NSW. July 26, 27th at Community Hall, Castle Hill. Open 9am-6pm (Sat), 10am-5pm (Sun). Organised by the 4th Castle Hill Scout Group.

European Outline Specialists

SOME OF OUR RANGE

• Liliput • Piko • Hamo • Marklin • Roco • Minitrix • Fleischmann • Vero • Herpa



Borsig I Runs with us!

• Contact us for quotes.

P.O. BOX 116, PYMBLE 2073. INFORMATION (02) 476 6275

A SUBSCRIPTION TO AMRM ENSURES YOU A COPY OF AUSTRALIA'S MAJOR MODEL RAILROAD MAGAZINE

RECEIVE YOUR COPY HOT OFF THE PRESS. KEEP YOU LOCAL POSTMAN IN WORK.

A years subscription (6 issues) costs $7.50 or $10.20 posted overseas.

Providing that the application for subscription is made at the AMRM office 4 weeks before the publication of the next issue the first magazine of the subscription will be the next issue, failing that the issue after. Receipts are not issued although acknowledgement of receipt of subscription will be given if a SSAE accompanies the subscrption.

Subscriptions are not back dated.

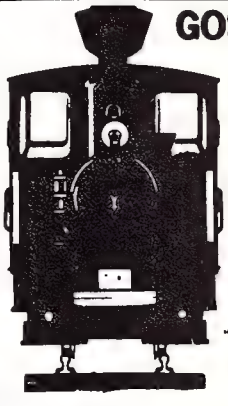
Subscriptions are for one year only.

Subscriptions are advised upon the expiry of the subscription. Please do not send money in anticipation of expiry.

SEND YOUR MONEY
NOW
TO

**SCR PUBLICATIONS,
PO BOX 235, MATRAVILLE,
NSW 2036**

Please make all money orders payable to Matraville.



GOSH GAUGE!

We've decided that the G in our name stands for Gosh! 'cause that's what everyone says when they see it. You will too. Send $2.00 for our full descriptive brochures.

LGB

"The World's First and only Indoor-Outdoor Railway."

L.G.B.
AGENTS

P.O. BOX 527,
MANLY. 2095,
AUSTRALIA.
Phone: (02) 211 2171

TRADE PRACTICES ACT 1974

The above act is now in force and contains strict regulations on advertising.

It is not possible for this company to ensure that advertisements which are published in this magazine comply with the Act and the responsibility must therefore be on the person, company or advertising agency submitting the advertisement for publication.

In case of doubt, consult your lawyers.

SCR Publications.

Stephenson's Rocket

Reproduced in UK

A faithful reproduction of the famous steam locomotive, Stephenson's Rocket, was unveiled recently in London's Hyde Park.

Demonstration runs of the reproduction Rocket, along a length of railway track in Albert Memorial Road, were opened by Mr Norman St John-Stevas, Minister with responsibility for the arts, museums and libraries.

Built by a specialist company called Locomotion Enterprises of Springwell, Tyne and Wear, in northeast England, the new Rocket was commissioned by the Science Museum.

The model of Stephenson's engine will take part in the 1980 celebrations to commemorate the Rainhill trials and the 150th anniversary of the Liverpool and Manchester Railway.

The trials were organised in 1830 by the L&M Railway Company to test new and more efficient steam locomotive designs. The Rocket easily beat its competition and steamed into transport history.

Pulling a 12.75 tonne load, the 4.25 tonne engine achieved an average speed of 13.8 mph over the Rainhill circuit and touched a maximum of 24.1 mph.

Apart from being used on special occasions, such as the Rainhill commemoration, the model will normally be on display in the National Railway Museum in York, northeast England.

N.S.W. VEHICLE COUNTDOWN — 14

In 1975, the N.S.W.P.T.C. had 149 '3101' series suburban electric control motor cars available for service. By 1978, only 107 vehicles of this type remained on the register.

Paul Rogers

ARCADE SIGNAL BOX

A few items from our ever increasing range

SUYDAM

Mission Style Station	$9.80
Modern Industry	$6.95
Box Factory	$9.20
Brown Bungalow	$8.50
Dr Whyte's House	$9.65
Red Lake Mine	$6.35
Buckhorn Mine	$15.45
Black Bart Mine	$5.30
2 Stall Engine House	$11.20
3 Stall Roundhouse	$16.85
3 Extra Stalls for Roundhouse	$13.55
Bekins Warehouse	$16.60

MUIR MODELS

Toulomne Train Repair Shed	$35.20
Marly Grist & Saw Mill	$19.45
D&RGW Coaling Bin	$15.45
Cudahay Meat Packers	$19.45
Los Pasos City Water Tower	$18.25

SUGAR PINE MODELS

Covered Bridge (Road Type)	$19.65
Branchline Water Tank	$13.95
Sand House	$15.45
Farm Water Tank	$18.25

MAGNUSEN MODELS

Victoria Falls Bank	$21.10
Fountain Brewery	$42.20

BOWSER

Casey Jones 4-6-0	$73.10
Old Lady 2-8-0	$73.10
Pennsy 4-6-2	$79.55

RIVAROSSI

Santa Fe 4-6-2	$99.95
NYC J3 4-6-4	$99.95

WRENN

City of Glasgow 4-6-2	$60.00
BR 8F 2-8-0	$64.00

REVELL HO

Superior Bakery	$6.55
Weekly Herald	$6.95
Barnyard	$5.95
Station	$6.55

ATLAS HO

Station	$5.65
Water Tower	$4.25
Signal Tower	$4.25
Trackside Shanty	$2.20
Warren Truss Bridge	$2.90
Plate Girder Bridge	$2.90

ADVANCE SIGNALS

Coming items include more of the popular Athearn Truck Trailer combinations especially the wanted Safeway set. Athearn and Ulrich truck wheels sets to upgrade your Yatming Kenworth prime movers. The Athearn Trainmaster is coming. Further stocks of the Railcraft flexible track and loose rail will be available when this magazine goes to press. Remember our prices for this popular range are much lower than those asked by other local suppliers.

SHOP HOURS of the Northern Suburbs Leading Hobby Shop are:

Mondays thru Thursdays 9am to 5.30pm
Fridays 9am to 9pm
Saturdays 9am to 12 noon

We do not subscribe to the policy of other stores of being closed when you wish to make your buys.

MAIL ORDER

We welcome your mail orders but please remember that the postage rates charged make it necessary for us to request that you pay postage.

AND BANKCARD IS WELCOME.

Arcade Signal Box

Shop 8, Foleys Mall,
445 Sydney Road,
COBURG, Vic 3058
Tel: (03) 354 8549

Be 'trained' by us — **Let us 'train' you**

Concord Hobbies

Christmas Specials

Jouef Mk. 40 Class Diesel Loco Blue $27.50

Roco
Rolling stock, track and points 20% Discount

Piko
HO Model trains from the GDR. 15% Discount. Mainline, Marklin, Rivarossi, Liliput, all at discount prices.

Building kits
Vero, Tyco, Pola, Kibri, Vaupe. 15% Discount. TT Model trains by Berliner TT Bahnen 20% discount.

Catalogues
Roco, Piko, Vero, Liliput, Mainline $2.50 plus postage

HO

HELJAN Roundhouse	$29.50
HELJAN Turntable manual	$29.50

Also Available in 'N' Scale.

Gears cut for old and new model trains.
Send SSAE to

CONCORD HOBBIES
43 Currawang Street,
Concord West 2138
(02) 73 5434

T.C. RAIL MODELS

We apologise to our customers for the delays that have occurred in delivering reserved models in the 'R' series. As at Mid-February, those persons who had reserved kits prior to October, 1979 would have received notices of availability for their FR vehicles. Our next shipment will comprise HR's (our type 2 and 3) and a few more FR's, following which will be BR's and the rest of the series.

Deliveries will continue at a reduced level for the foreseeable future because only one partner in Workshop 5 Models is now able to work in casting parts. Therefore, reservations for FR vehicles will close on 30th April, 1980; similarly customers requiring HR cars must advise us by 31st May, 1980. We do not anticipate 'R' cars being available unreserved at exhibitions etc, though all reservations will be filled in due course.

To reserve models, simply advise us by letter what you would like. No money is involved until the kits are actually available.

Prepared and Distributed by:-

T.C. RAIL MODELS
P.O. Box 374,
HORNSBY,
NSW 2077.

WALTHERS HO Catalogue — 1980 Edition $5.00 ea.
(Post Qld $1.25; NSW $2.70; Other $3.10).

WALTHERS N Catalogue 1979/80 Edition $3.80 posted.

ATLAS N SCALE new range of 14 roadnames for Caboose now available at $3.95 ea.

ROUNDHOUSE N NEW Railbox cars. 12 separately numbered cars available. $6.75 each.
Also Hi-cube and Gondolas available at $6.75

CON-COR New F3 with PA 1 style 5 pole motor. Available in 10 Roadnames incl S.Fe, UP, GN, SP, CB&Q, Crane and Idler Flat (various names) $15.95

ENDO Shinkansen New Tokaido Line Bullet Train N Scale Etched Brass rtr 6 unit set $156.00
(additional cars available).

KATO N scale
EF-57 Electric 4-6-6-4 Undec $47.95

KALMBACH

Building Plastic Railroad Models	$9.50
Mod the Clinchfield in N scale	$4.50
Track Planning (New Edition)	$7.95
Diesel Spotters Guide Update	$7.95

COCKLE

Big Blows (UP)	$6.95
Roaring U50's	$9.95

ROAD CHAMPS HO SCALE Vehicles

Construction (Dozers, loaders, etc)	$1.69
Kenworth Cabs	$1.98
Cab and Trailer 40'	$2.69

See us at the 1980 Brisbane Model Railway Exhibition May 3, 4, 5.

BANKCARD WELCOME
Orders over $20.00 post free.

J. & J. HOBBIES
P.O. Box 155, Beaudesert, 4285
Ph (075) 41 1014

from good hobby shops everywhere

PECO

A FEW LESS FREQUENTLY ADVERTISED LINES

NR-121B

HO/OO FLEXIBLE TRACKS - 906mm (1 yd.) lengths

SL-100S	Wood Grained Sleepers with steel rails	$2.00
SL-110B	Wood Grained Sleepers with brass rails	$2.25
SL-102S	Concrete Sleepers with steel rails	$2.00
SL-102B	Concrete Sleepers with brass rails	$2.25

OTHER BITS & PIECES FOR HO/OO

SL-10B	Brass Rail Joiners - Packet of 24	$1.00
SL-14	Track Fixing Pins - Packet	$1.00
SL-29	Uncouplers for Triang/Hornby - Two	$1.50
SL-30	Uncouplers, type A/HD - Two	$1.00
SL-31	Uncouplers for Trix - Two	$1.00
IL-20X	Nickel Silver Fishplates for flat bottom rail in packet of 25	.80
IL-21X	Nickel Silver Fishplates for Code 95 Bull-head rail in packets of 25	.80
LK-6	Station Bookstall	$2.95
LK-21	Chocolate Vending Machines (6)	$1.35
LK-22	Weighing Machines (4)	$1.15

SOME N GAUGE LINES

NR-45S	Cattle Wagon - Southern Railway - Ready-to Roll ..	$3.50
NR-100	Hardlon Wheels in packs of 2 sets	.95
NR-102	N gauge Couplers . E.L.C. - 2 pairs	.85
NR-121	Wagon Chassis, 10ft wheelbase	$1.50
NR-121B	Brake Van Chassis, 10ft wheelbase	$1.95
NRP-120	Salt Van - SAXA - Ready-to-Roll	$4.25
IN-2	Book - "Lineside Features in N"	70c
NB-31	Single Tunnel Portal (2)	$2.50
NB-32	Double Tunnel Mouth (2)	$2.50
NB-28	Stone Platform Edging	$1.50

& SOME O GAUGE POINTS & ACCESSORIES

TO ALL RETAILERS: The prices set out or referred to herein are recommended prices only and there is no obligation to comply with the recommendation.

SL-791X	Right Hand Point, 1828mm radius	$29.95
SL-792X	Left Hand Point, 1828mm radius	$29.95
SL-797X	'Y' Point, 1828mm radius	$29.95
SL-701	Point Sleepering (20)	$2.25
SL-702	Running Rail Chairs (100)	$2.95
SL-703	Slide Rail Chairs (50)	$1.50
SL-707	Frog Units ..... Each	$1.75
SL-708	Point Blades and Brackets	$2.65
SL-709	Switch Kit for Electrofrog ..... Each	$1.95
SL-740	Rail Built Buffer Stop Kit	$1.25

It is regretted that price rises in England, combined with an increase of 20% in import duties and the ever upward cost to us of the Pound Sterling, are leading to more and more rises in prices in Australia. Prices advised in this advertisement are subject to change without notice and should be taken as a guide only.

Bring your layout to life WITH

MERTEN

FIGURES & ANIMALS

IT IS THE SMALL THINGS AND THE ATTENTION TO DETAIL THAT ATTRACTS AND HOLDS THE EYE OF THE ONLOOKER

AN AMC DISTRIBUTED PRODUCT

AROUND THE POOL, NOW-A-DAYS A FEATURE OF A GREAT MANY HOMES, OR ON THE BEACH

FOR THE WINTER SEASON IN THE HIGHLANDS - SKATERS AND SKIERS

HO/OO

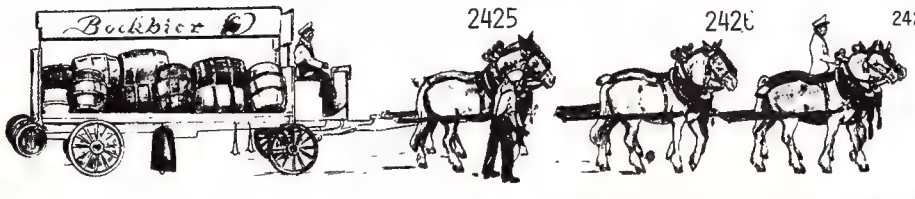
$2.95 per box

N

$2.95 per box

IT IS NOT UNCOMMON TO SEE A HERD OF CATTLE OR A MOB OF SHEEP BEING DRIVEN ALONG COUNTRY HIGHWAYS AND BYWAYS. BACK IN THE DAYS OF STEAM SHEEP AND COWS WERE A COMMON SIGHT IN THE PADDOCKS OF SUBURBIA

IN COUNTRY TOWNS AND VILLAGES IN THE DAYS OF STEAM HORSEMEN AND HORSEWOMEN WERE A COMMON SIGHT ALONG WITH HORSE DRAWN DRAYS AND CARTS.



HO/OO

*948 Beach Party, standing & kneeling
*954 Beach Party, six reclining
*960 Beach Party, men, women & children
*2174 Beach Musicians in togs

982 Walking Injured after accident
988 Doctor, Nurse with stretcher case

2132 Six skiers with skis & luggage
2138 Six Skaters with hockey gear
2144 Six Men Skiers in action
2150 Six Lady Skiers in action
2215 Six Ice Skaters
2227 Couples Skating
2230 Snow Party, Snowman etc.

*2403 18 Sheep
2407 Six Cows & Calves
2408 Six Skittish Horses
(N2408 Eight Saddle Horses, 2 foals)
2409 Six Placid Horses
(N2409 Eight Draft Horses, 2 foals)
2426 Team of four draft Horses, may be used with 2424 or 2425

*1008A Three Mounted Horsewomen
*1008B Three Mounted Horsemen

** ** ** ** **

2424 Long Dray with load, driver & assistant, 2 horses $6.95

2425 Beer Wagon with cask load, driver & assistant, 2 horses $6.95

Sets marked * also available in N

TO ALL RETAILERS: The prices set out or referred to herein are recommended prices only and there is no obligation to comply with the recommendation.

from good hobby shops everywhere

FOR TRADE AND GENERAL ENQUIRIES -
AUSTRALIAN MODEL CRAFT CO., 577 Dean St., Albury, N.S.W. 2640 (P.O. Box 118)

WE HAVE MOVED

RAIL MAG SERVICE

ARE NOW AT SUITE 21, 583 GEORGE STREET, SYDNEY

For all your Rail Magazine Back Issues, Pre-read books on Railroads & Modelling. Used Model Railway Equipment Sold & Bought. (Brass to Tri-ang).

OPEN 11 am-6.30 pm
Tuesday - Saturday

Tel (02) 601 7906

TT

BERLINER BAHNEN

VERO

GEM

MIKES MODELS

PECO

Alce's Hobby Shop
Shop 6, 20 McFarlane Street, MERRYLANDS
Ph (02) 682-3775

Mail Orders a Pleasure.

Full price lists available.

MODEL POWER Diesels

Baldwin Shark Nose SF Penn	$28.00
Baldwin Shark Nose "B" Unit Dummy SF Penn	$13.00
FA2 SF Penn	$28.00
FB2 Dummy "B" Unit SF Penn	$13.00
E7 SF UP	$29.00
E9 SF	$29.00
Alco 420 SF UP	$19.00
Alco C628 SF	$18.00
F9 SF NH Rock	$14.00
Alco RS11 SF Sth Con Rail	$14.00

MODEL POWER Steam

Old Time 0-4-0 Tender Loco	$19.00

ATHERN Diesels

F7A SF UP	$25.00
F7B SF UP Dummy	$9.00
Alco S12 SP	$24.00
Alco PB1 "B" Unit UP Dummy (to clear)	$8.00

ROUNDHOUSE

HOn 3 2-8-0 Inside Frame Loco Kit	$75.00

KEMTRON

HOn 3 8 Wheel Caboose	$20.00

CAMPBELL Structure Kits

307 Wharf	$24.00
363 Campbell Supply Co	$23.00
371 Mathews Mercantile	$21.00
387 Gran'ma's House	$31.00
392 Norm's Landing	$25.00
396 Norm's Landing Boat Shop	$25.00
394 Hamilton Dinghies	$34.00
416 SAEZ Sash and Door Mill	$35.00
417 SAEZ Lumber Yard and Chute	$39.00
422 Richmond Barrel Co	$29.00
423 Kiowa Junction	$29.00
399 Tuckaho Produce House	$28.00

SANGO HOn 2½

A superb range of HOn 2½ (009) Kits from Japan. These are mostly of Brass Construction and beautifully detailed. For the discriminating modeller!

R200 2-6-0 Mogul Tender Loco	$135.00
R201 0-4-0 Koppel Side Tank Loco	$94.00
R202 0-4-2 Baldwin Logging Loco	$78.00
R207 0-4-0 Tank Loco	$49.00
R209 0-4-0 Porter Saddel Tank Loco	$38.00
R301 Diesel Loco	$48.00
R501 Guards Van 4 Wheel	$14.00
R502 Open Platform Coach 4 Wheel	$15.50
R503 Coach 4 Wheel	$14.00
R504 Open Platform Bogie Coach	$18.50
R507 Bogie Coach	$19.50
R803 Van 4 Wheel	$13.00
R804 Open 4 Wheel Wagon	$11.00
R809 Open Platform 4 Wheel Van	$14.50
R814 Bogie Gondola	$13.50
R900 HOn 2½ Arch Bar Trucks (1 pr)	$5.00

All items advertised currently in stock. Please add 5% for post and packaging. Excess refunded.

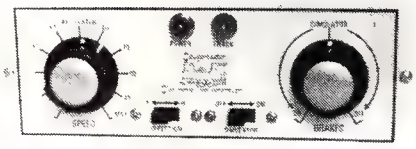
RAMAC MODEL CO

PO Box 204,

MT GRAVATT, QLD 4122.

2 Gaynesford St.
Phone (07) 343 6667.

'GAUGEMASTER' IS HERE!



Famous 'Gaugemastér' control unit now available in Australia.

Features include:
- Automatic acceleration.
- Extended coasting.
- Progressive braking.
- Direct control for shunting etc.
- Input 12-18 volts A.C.
- Output 12 volts at up to 2.5 amps D.C.

Tested and approved by FLEISCHMANN

- Ex stock delivery.
- Mail order a speciality.
- Further information from:

GAUGEMASTER AUSTRALIA
P.O. Box 44, Turramurra 2074, N.S.W. Tel: (02) 449 2268

DISCOUNTS

Fox Mail Service for Continental Model Railways

LILIPUT
The

LILIPUT
The latest products from this remarkable Austrian factory are probably the highest quality production models made ever — anywhere.
The Rolls Royce of Model Railways.

ROCO
A highly detailed product at a more reasonable price.

4190 Dutch Electric set	$78.00
4114B Tank Loco	$25.00

Write or Phone for my low discount prices

Fred Fox
Box 111 PO, Doonside 2767
Phone (02) 622 6826

Free Gift Offer

IMPORT HOBBIES

Free Gift Offer

IMPORT HOBBIES welcomes in the Eighties with a super sale. Many items are reduced to clear for new shipments from overseas. Once sold these prices will not be repeated. With each N Scale order over $30 a piece of rolling stock or Wiking car set will be included free. With each HO Scale order over $20 a vehicle or handcar will be included free. For HO orders over $50 one piece of rolling stock will be included free. Offer ends April 30, 1980.

ROUNDHOUSE 'N'

	$ ¢
Hi Cube Box UP, D&RGW, SP, SF	$6.25
Thrall Gondola WE, UP, D&RGW, BN, CE, LE	6.25

KADEE 'N'

40' Std Box 1 dr ATSF	5/31.95
40' Std Box 1 dr SP, GN, CB&Q	6.00
40' Std Box 1 dr UP, D&RGW, ACY	5.75
40' Std Box 1 dr WP	6.50
40' Std Box Plug/Slide dr:	
BN, UP	5.75
GN, NP	6.25
40' OB Box 1 dr SP	6.25
40' OB Box 1½ dr NP, CB&Q	6.25
50' Std Box Plug Door GN, RF&P, SF	6.25
40' Stock Car UP, GN, SF, RG	6.00
50' Flat Car Str Side SF, BN, Wey	6.00
50' Flat Car Fish Belly SP, UP, RG	5.10
50' Gondola BN, WP, SF	6.00
40' Wood Reefer PFE	5/36.75
40' Wood Reefer SF, Swift, NYD	6.95
34' Wood Caboose UP, SF, BN, SP, CB&Q, GN	8.25
33' Hopper Offset SF, GN, BN	6.95
33' Hopper Offset Clinch	5/34.00
33' Hopper Rib Side Virg	6.50
33' Hopper Comp SF, CB&Q, WAB	6.50
1000 Betten Truck wi coupler	3.15
1001 Betten Truck wo coupler	1.85
1002 Betten Truck wi coupler	3.05
1011 Arch Bar Truck wo coupler	1.85
1012 Arch Bar Truck wi coupler	3.05
1023 Coupler Assembled	2/3.60
1025 Coupler Kit	2/2.70
1055 Std Gauge	4.35
1310 Uncoupler	2/3.60

As well we have a large range of coupler conversion kits to fit most US style locos from $6.00 to $11.50.

DIMI TRAINS

Rotary Snow Plough Kit	16.80
40' Repair Car Kit	8.40
40' Crew Car Kit	8.40

Above kits are plastic and include trucks. Great for work trains.

We also have a good deal of Con-Cor, Atlas, Minitrix and Model Power N Scale items.

MAGAZINES

Model Railroader	1.25
Railroad Model Craftsman	1.25
Trains	1.50
Railfan & Railroad	1.50
Passenger Train Journal	1.75
Narrow Gauge & Shortline Gazette	2.25
Aust Model Railway Magazine	.90

BERG'S

NSW Island Station Kit	13.00

RECORDS

Puffing Billy 7" EP	2.00
Sounds of Steam 7" EP	2.00
Steam Panorama 1st Div LP	6.00
2nd Pigeon & Mockingbird LP	8.00
Thunder on Blue Ridge LP	8.00
Mainline to Panther LP	8.00
Sounds of Steam Railroading LP	8.00

JORDAN

213 '25 Ford Roadster-Pick Up	3.50
216 '25 Ford Panel Truck	3.15
217 '29 Ford A Station Wagon	3.15

ATHEARN HO

	$ ¢
PA 1 SF (1 only)	24.00
Std Pass Cars SF	6.50
Strm Ln Pass Cars SF, SP, NH	6.50
Rolling Stock	From 3.50

ATLAS HO

FP 7 UP (1 only)	30.00
GP 40 Cotton Belt (1 only)	30.00

COLLECTOR'S CORNER

GP 9 N&W Maroon	38.95

CAMPBELLS PARTS

250 Wood Barrels	1.30
251 Oil Drums	1.50
255 Brass Light Shades	1.30
256 Chain	1.75
796 Std Gauge Sleepers 1,000 for	4.25
799 Nar Gauge Sleepers 1,000 for	3.45
800 Shingles	3.10
900/911 Asst Windows	Pk 1.00
912/919 Asst Doors	Pk 1.00
921 Corbels	.95
923 Chimneys	1.10
927 Cyclone Vents	1.10
928 Street Lamps	.95
934 Smoke Stacks	1.05
935 Hinges	1.10

CAMPBELLS KITS

304 Tall Curved Trestle	15.05
305 Howe Truss Bridge	19.60
352 Mine Head Frame	11.95
359 Church	24.00
373 Corrugated Warehouse	11.55
380 Gazette Office	12.25
381 Farm House	11.70
382 Barn	16.20
386 Quicks Coal	29.70
388 Silver Spur Mine	28.35
392 Norm's Landing Pier	19.35
404 Quincy O'Head Crane	10.25
785 Freight Platforms	3.20

WESTON FIGURES

1101 Handcar & Rider	4.75
1102 Handcar	3.65
1103 Potbellied Stove	.80
1105 Wheelbarrow	.85
1200 Engineer	1.75
1201 Fireman	1.75
1202 Red Cap w/luggage	1.80
1203 Red Cap	1.65
1204 Station Master	1.80
1208 Dining Car Waiter	1.80
1212 Hobo w/stick & fire	1.90
1231 Flexible Freddie	1.65
1233 The Thinker	1.65
1255 Old Man asleep in chair	2.05
1401 Pigeons	1.50
1403 Dog Sleeping	.80
1600 Rowboat with oars	1.05
1605/6 Concrete/Stone Bridge	2.55

KADEE 'HO'

No 5 Couplers	2pr/3.00
No 4, 6, 7, 8, 16 Couplers	2pr/3.10
No 9 Couplers	2pr/3.35
208 Coupler Height Gauge	3.60
231 Greas-em	1.45
308 Uncoupler	2.65
321 Uncoupler	2/3.40
437 Cattle Guard	1.60
438 Air Hoses & Angle Cocks	1.40
439 Nut Washer Bolt Detail	1.35
500 Bettendorf Trucks	Pr 3.65
501 Arch Bar Trucks	Pr 3.65
520 Freight Wheel Sets 33 in	4.80
521 Passenger Wheel Sets 36 in	5.10

Listed below are some items of interest for our HOn3 fans. Please note some items are not yet available but due soon.

SHINOHARA Code 70

	$ ¢
No 4 LH RH Points	5.60
No 6 LH RH Points	5.15
Flex Track 1 m	3.15
Flex Track 1 m dual gauge	4.50
No 6 LH RH point dual gauge	11.25

ROUNDHOUSE

2-8-0 Outside Frame due soon	56.00
2-8-0 Inside Frame due soon	56.00
0-8-0 Tank Dummy	21.70

E&B

404 RGS Caboose	20.95
500 DRGW Caboose	26.50
600 DRGW Combine	26.50
700 DRGW Baggage	26.50
800 DSP&P Pay Car	22.35
3319 DRGW Coach	26.50

SEQUOIA SCALE MODELS

6001 DRGW 24' box car	9.10

RAILLINE

130 DRGW 30' box car	12.60

KEYSTONE

103 29' log car	2 for 11.90
1053 Class A Shay	52.50

KADEE

709 Uncoupler	2.35
714 Coupler	2.70

For O Scale modellers, we have the following in very limited numbers.

KEYSTONE

1000 Log Car	20.95
1002 Danby Sawmill	52.50
1005 Grasse River Caboose	25.15
1006 Grasse River Log Buggie	2/25.15
1108 Grasse River Log Trucks	Pr 4.90

ATLAS

F9 SF, BN, UP	32.00
Plymth Switcher SF, UP, MR	22.00

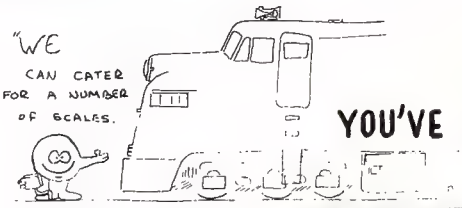
KADEE

805 Coupler	3.50
811 Uncoupler	2.15

NEWS BITS

Athearn production is now back on line after their move last July/August. Unfortunately the RDCs have been put back even further and delivery will be some time yet. Anyone who has placed a monetary order with us can obtain a refund if required. As an extra special this issue, we are offering Keystone HO 102 Working Log Unloader kit at $7.85 ea. We have three 1979 Walthers HO Catalogues available to any Clubs for free. Please include $2 for postage or pick-up free from our shop. We have a large range of Micro Scale Decals in WP, BN, SP&S, SP, D&RGW and others at $3.85 each. Not to mention a very good range of MnJ Decals in HO and N in both local and US prototype at $1.00 per set. New arrivals for the super detailer are Walthers HO Diaphragms at $1.50 pr, Athearn Coach Interiors at $4.55 ea, Athearn Pullman Interiors at $4.55 ea, Athearn Postal Baggage Interiors at $2.55 ea and Walthers Moulded Car Seats at $2.45 ea. Recent Cal-Scale arrivals are the HO Hydra-Cushion detail kit at $2.25 and their Timber Trestle kit in N at $3.50 ea. Please note postage is extra on all items at standard Post Office rates plus 25¢ handling fee. Please allow extra, any excess refunded.

IMPORT HOBBIES
4 Windemere Court,
ALBANY CREEK, QLD 4035
Telephone: (07) 264 2061



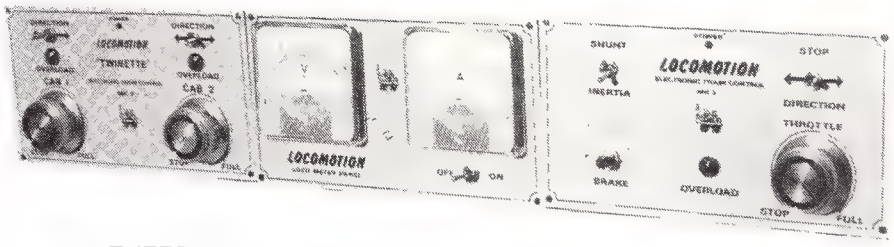
TRAIN CONTROLS

YOU'VE TRIED THE REST... NOW BUY THE BEST... WITH

"MK 3 or TWINETTE"

LOCOMOTION

- THE AUSTRALIAN MADE CONTROLS
- WITH A GREAT TRACK RECORD
- TRIED AND PROVEN DESIGN+100's SOLD
- BUILT FOR THE DISCERNING MODELLER



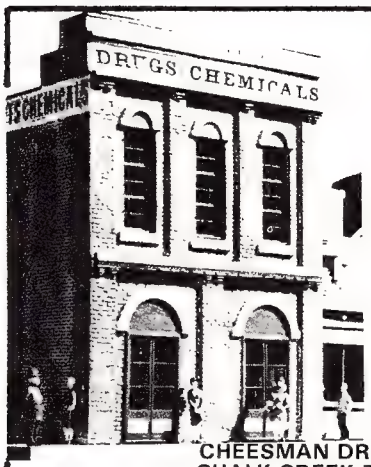
SEND SAE foolscap envelope for your free LOCOMOTION CATALOGUE to .....
LOCOMOTION PRODUCTIONS.
14 Jennifer Crescent, THIRROUL 2515.
(042) 67 2496. . . . or enquire at leading Model Shops & Mail Order services in Australia.

FEATURES

*Flush Panel Mounting.
*Separate Controls developed for either HO or N gauge systems.
*Mk 3 with full Inertia Control Simulation.
*TWINNETTE Offering 2 separate standard cabs on the one panel plate.
*Positively silky smooth controls with pulse power for smoother starts.
*Overload and shortcircuit proof, a real must.
*Beautifully finished etched, engraved & baked, silver/black front panel.
*Requires 12 to 20 volts AC @ around 1 AMP from external power source.
*All controls supplied with comprehensive instructions & screws.

DON'T FORGET TO LOOK AT THE MATCHING LOCOMETER THAT MONITORS YOUR TRAINS PERFORMANCE . . .

SEE LOCOMOTIONS FULL PRODUCT RANGE ON BILL WEBBS STAND AT THE BRISBANE MODEL RAILWAY EXHIBITION . . .



CHEESMAN DRUG CO
CHALK CREEK BRIDGE
GAZETTE BUILDING

MODEL MASTERPIECES LTD.

In AUSTRALIA

NEW RELEASES:
Cimarron Supply Co.
Shortline Enginehouse & Shop
2-Stall Stone Loco Shed with Powerhouse
Plus a new range of scratch building details and parts.

ALCE'S, Merrylands, NSW. **BRANCHLINE,** Croydon, Vic. Trade & Inquiries, **CHI Products,** 4 View St, Upwey, 3158.

All available now —
CHI Products (Imports)
4 View Street, Upwey. 3158.

FSM

NSWGR Z18 Class Tank Loco
Posted:- $75.00

NSWGR Z24 & Z25 Class Loco & Tender **Posted:- $90.00**

NSWGR C35 Class Loco & Tender **Posted:- $115.00**

NSWGR D53 Class Standard Goods Loco, Wampu Tender.
Posted:- $130.00

NSWGR D55 Class Standard Goods Loco, Turrett Tender.
Posted:- $135.00

Wampu & Turrett Tenders, each
Posted:- $40.00

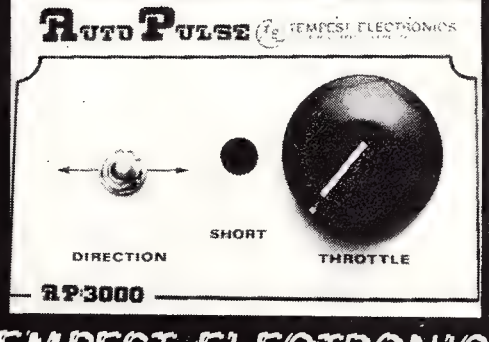
Finecraft Scale Models Pty Ltd
PO Box 169, Forestville, 2087

23 Tottenham St, Nth Balgowlah, NSW 2093

C35, D53 & D55 Classes can be supplied with either Type of Tender as required, no extra charge.

Electronic Throttle $18.25

rec. retail price



The smaller brother of our famous AP7000 throttle.

Features:
- Pulse power for slow speeds.
- Electronic circuit protection.
- Easy to install and operate.
- 2 year guarantee.

TEMPEST ELECTRONICS
33 BORG STREET, SCORESBY, VIC., 3179

NOW AVAILABLE '00' GAUGE FROM AUSTRALIAN MODEL SHOPS

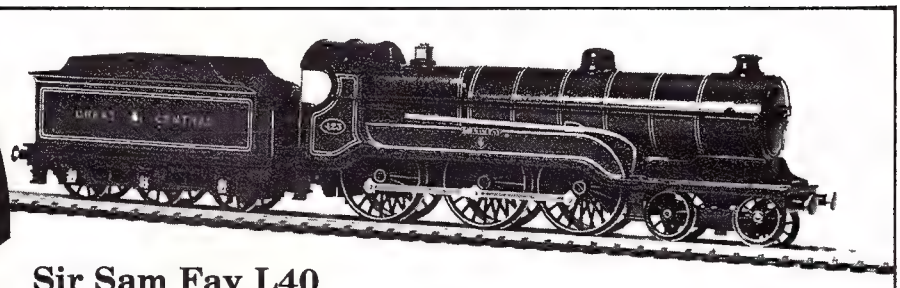
WITH

NEW MOTORS
COMPLETE WITH GEARS

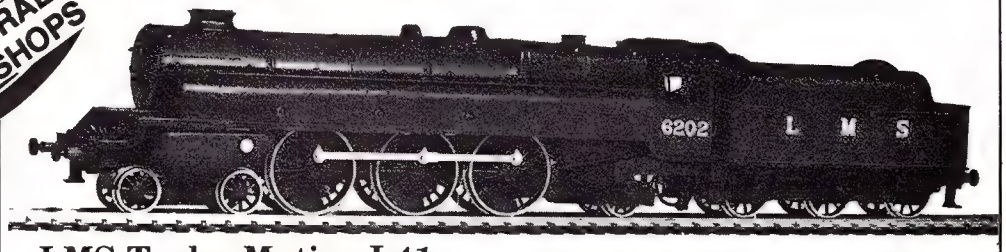
NEW SHRINK WRAP
VISIBLE PACKING

COMPLETE KITS
NO EXTRA MOTORS,
CHASSIS OR WHEELS
TO BUY

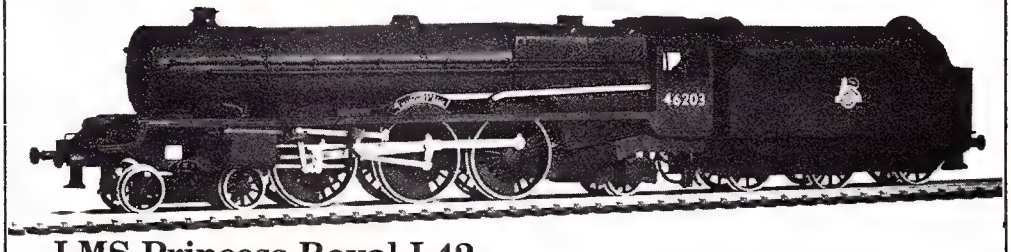
NEW CATALOGUE
$2 POST PAID



Sir Sam Fay L40

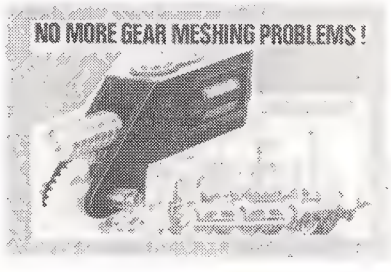


LMS Turbo-Motive L41



LMS Princess Royal L42

Other locomotive kits include
LNER STREAMLINED P2. 2-8-2
LMS JUBILEE 5p. 4-6-0
LMS BEYER-GARRAT 2-6-0-0-6-2
GNR ATLANTIC 4-4-2
LNER R.O.D. 2-8-0
S.R. RADIAL ADAMS TANK 4-4-2
GWR GRANGE 4-6-0
GWR DEAN GOODS 0-6-0
M.R. JOHNSON 2F. 0-4 0
Ideal for beginners
S.R. Q1. (THE UGLY ONE) 0-6-0



Also Available
* COACHES incl GWR AUTO COACH
* WAGONS incl LOW SIPHON
* THE NEW MOTOR WITH AXLE AND GEARBOX (GEARS 7.5mm & 14mm)
* OO/HO FIGURES. SETS OF 5
* LOCOMOTIVE DRIVING WHEELS 12-30mm
* NEW 'MILESTONE' UNMOTORISED KITS

KEYSER MODEL KITS

TRADE ENQUIRIES TO:

INTOY PROJECTS

R229 BROADWAY SYDNEY 2007 Ph: 660-2536

RETAIL MAIL ORDER DEPT. C/- FANTASTIC MODELSHOPS, 34 ANGEL ARCADE, SYDNEY, 2000
DUE TO LONG ADVERTISING LEAD TIMES WE CANNOT GUARANTEE IMMEDIATE AVAILABILITY OF ABOVE ITEMS

Like steam?

So do we

But to continue operating steam trains, we need your help.

We urgently need to develop our site at Kingston, ACT, providing much-needed workshop accomodation and cover for our three locomotives - Beyer-Garrett 6029, S-Class 3102 and 3016.

We also need money to repair the boiler of 3016, so that all three locomotives can be fully operational as soon as possible.

If you would like to help - please send a donation now (Gifts of $2 or more are tax deductible, if your cheque is made out to 'Canberra Railway Museum', or write to the Hon. Secretary, Australian Railway Historical Society (ACT Division), PO Box 112, Civic Square, ACT 2608.

The Society also invites you to join any of the following excursions from Canberra:

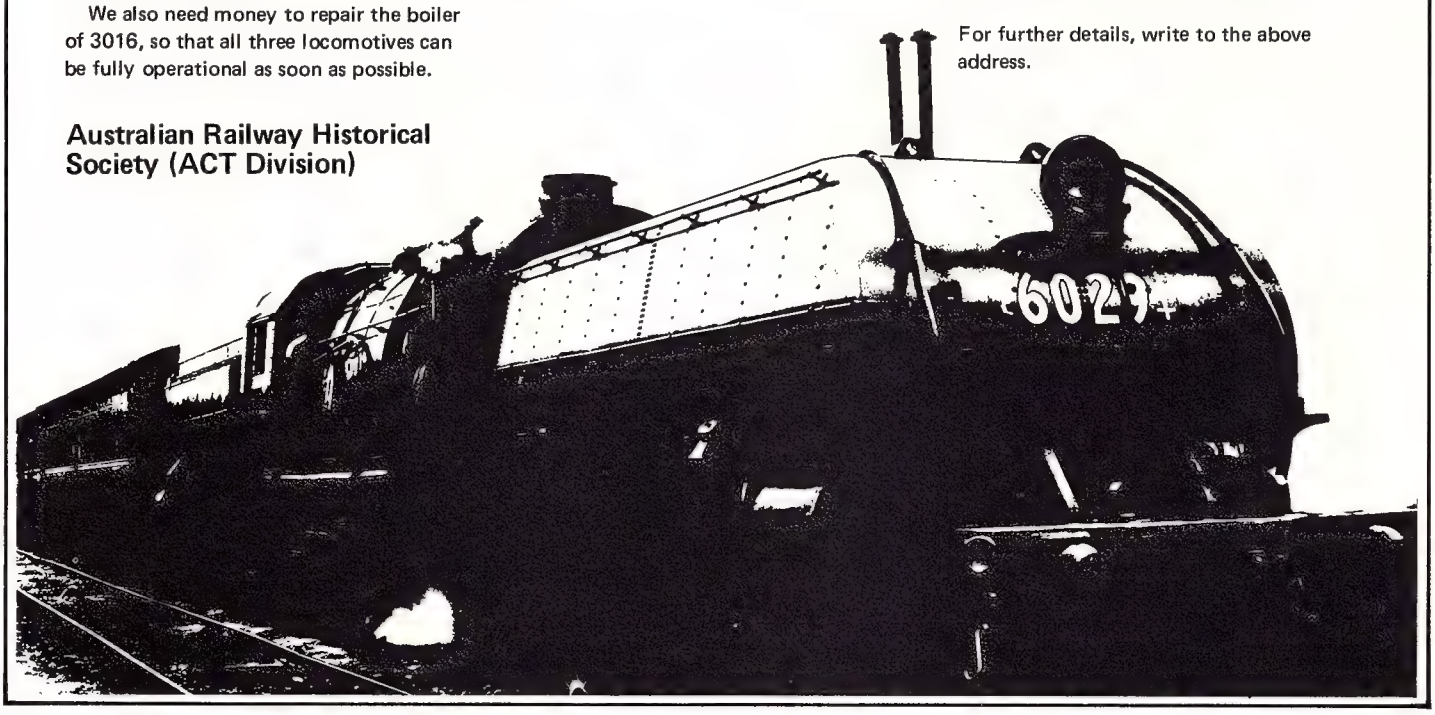
EASTER 1980 A number of different tours to Farrer, Royalla and Michelago. Locomotives 6029 and 3012 will both be used during the weekend.

SUNDAY 4 MAY Jazz train to Michelago

JUNE LONG WEEKEND Down the Main South to Albury, using 6029, with possible broad gauge extension, There will be connections from Sydney and Melbourne.

For further details, write to the above address.

Australian Railway Historical Society (ACT Division)



THE GREAT TRAIN SALE CONTINUES

Check the Range! OO/HO & N
TRACK: Peco Hornby, Roco, Lima, Shinohara.

LOCO & ROLLING STOCK: Hornby, Lima, Roco, Mehano, Rivarossi, Roundhouse, Life-like, Airfix, Model Power, Tyco, Athearn, Atlas, Bachmann, Piko, Minitrix, Roco, Liliput, Wrenn, Jouef, Model Dockyard Brass Locos, Friedmont Kits, Scotia Kits, etc.

TRANSFORMERS & ELECTRICS: H & M range, Tempest Autopulse, Wires, Switches, Globes, Lights, etc.

TRACKSIDE KITS & ACCESSORIES: Heljan, Kibri, Pola, Tyco, Hornby, Vollmer, Builder Plus, Campbell Kits, Faller, AHM, Superquick.

TRADING HOURS
MON-FRI 9.00 to 5.00 pm
SATURDAY 9.00 to 2.00 pm
THURSDAY until 8.00 pm

Send SSAE for 1980 SPECIAL LISTING

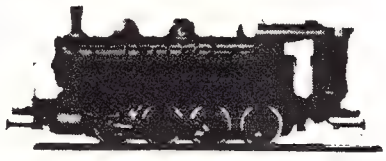
MAIL ORDERS WELCOME

TOYMAN IMPORTS HOBBY CENTRE

A DIVISION OF TOYMAN IMPORTS PTY. LTD.

76 RAILWAY STREET
YENNORA, N.S.W., 2161
(NEAR FAIRFIELD)

Phone: (02) 632 5002
(OPP YENNORA RLY STATION)



We send goods anywhere in Australia. Add $2 to list price to cover handling.

Price list available for the sending of a 20c stamp. New lists every month. Current lists are:

USED ITEMS
Athern
Ratio
Blandford Press
"N" Gauge Ministrip & Model Power
Golden West Books
Roundhouse
"O" Gauge Track/Buildings/Loco's
Track and Points "HO/OO" & "N".

We are open:
9am – 5pm Monday to Saturday and till 9pm on Fridays.

Our phone number is: (03) 578 5546.

We stock the following:
Atlas, Athern, Model Power, Roundhouse, Rivaroni, AHM, Mantua, Mirit, Peco, ZPL, Ministrip "N", Bachman, Mainline, Hornby, Lima, in hoeomotives and Rolling stocks. Magazines from USA & UK (ask for a list). Books from USA, UK and Australia. Regular lists of New Books.

THE DIESEL YEARS $19.80
The decade following WWI saw the development of the diesel loco. By the early 1940's they were becoming the prime power in America. A photographic album of the change. 8½ x 11".

AMERICAN NARROW GAUGE $27.50
A luxurious pictorial account of the narrow gauge lines still in operation following W.W.II. over 400 illustrations 256 pages.

GRAND CENTRAL $22.00
Origin and history of the famous New York Railroad Station from the first horse-drawn trains of 1832 to the present. More than 200 illustrations 160 pages.

THE RAILWAY CABOOSE $13.20
The 100 year History of the Railroad 240 pages.

ARTICULATED LOCOMOTIVES $16.50
is a landmark book on steam locomotion with many side elevation drawings for modulars. 628 pages.

STEAM LOCOMOTIVES, MODEL RAILROADER CYCLOPODIA VOL. 1 $36.30
details in HO seale drawings 29 types of Rod and Geared loco's.

PENN STATION $16.50
The design, history and operations of one of the busiest stations of them all.

"GREAT WESTERN IN COLOUR" $22.95
by O.S. Nock
A 160 page book on the G.W.R. full of coloured photos and drawings that are so much favoured by followers of British prototype.

"VETERANS IN STEAM" $29.50
by Colin Garratt
A 156 page full of nothing but colour photo's taken in both day and at night. The railways covered are Great Britain, German, Austrian, Yugoslavia, Greece, Turkey & Syria.

"RAILWAYS AND WAR" by D. Bishop & K. Davies.
Two Volumes: Before 1918 $10.50
Since 1917 $10.50

Full of details and colour drawings of a large range of railway at war. These books are a must for a modeller of this type of railways.

O.S. Nook – has written a series of six books that deal with railways from 1800 to the present day. The books are full of coloured illustrations with details of railways developments around the world.
"The Dawn of World Railways" 1800-1850 $9.95
"Railways in the Formative Years" 1851-1895 $9.95
"Railways in the Years of Pre-Eminence" 1905-19 $9.95
"Railways: The Zenith of Steam" 1920-40 $9.95
"Railways in Tranisition from Steam" 1940-65 $9.95
"Railways of the Modern Age Since 1963" $9.95

"TWILIGHT OF STEAM" $10.50
by Colin Garratt
There seem to be more pages of colour photographs than text in this 185 page book. There are 100 colour plates covering UK & European locomotives.

"STEAM IN THE LANDSCAPE" $9.95
by Kenneth Westcott Jones
One hundred & Eighty five pages of information on steam locomotives around the world (but mainly UK) and with over half the book being colour photo's.

"STEAM RAILWAYS OF BRITIAN IN COLOUR" by O.S. Nock $10.50
This 190 page book features biographes on 192 British locomotives of all ages together with full colour line drawings of the locomotives.

"STEAM RAILWAYS OF BRITIAN IN COLOUR" by O.S. Nock $9.95
Featuring 194 different items of British Railways – Locomotives – Carriages – Signals – Crest with narratives about them and fully coloured line drawwings of the subject matter.

"GREAT STEAM LOCOMOTIVES OF ALL TIME" by O.S. Nock $11.50
64 locomotives are featured in this book, each of which has a full page fully coloured line drawing of the locomotives. The locomotives are from every part of the world.

"A POPULAR GUIDE TO PRESERVED STEAM RAILWAYS OF BRITIAN"
by Colin Garratt $16.50
This book is 192 pages packed full of data, photo's (both colour & B&W) of the Preserved steam in Britian.

"STEAM SAFARI" $10.50
by Colin Garratt
190 pages on loco's in Africa with 48 full colour plates many extending over two pages. With action shots of Beyer Garratts to 4-8-0 of the Cape Government Railway. A must for the growing band of enthusiasts who follow steam on the African continent and especially South Africa where it has not and does not look lik being disclosed in the near future.

BRADFORD DARTON BOOKS

Southern Steam in Action : 1	$8.60
Southern Steam in Action : 2	$8.60
Southern Locomotive Survey, The Brummond Classes,	$8.60
Southern Locomotive Survey, Merchant Navy Pacifics	$8.60
Southern Branch Line Steam : 1	$8.60
Southern Branch Line Steam : 2	$8.60
Southern Electrics – A Pictorial Survey	$8.60
Steam on Britain's Miniture Railways	$8.96
London Midland Steam on the EX-L & Y	$8.60
London Midland Steam over Shap	$8.60
London Midland Steam in Action	$8.60
London Midland Steam in Action : 2	$8.60
Great Western Steam in Action : 2	$8.60
Great Western Steam Around Bristol	$8.60
Great Western Steam on Shed	$8.60
LMSR Steam 1923–1948	$8.60
LNER Steam 1923–1948	$8.60
The Tralee & Dingle Railway	$9.51

Train World

615 HAWTHORN ROAD,

EAST BRIGHTON, VICTORIA,

AUSTRALIA, 3187

Hobby Speciality Shop

Aspect Models

9 McGregor Street
CANTERBURY Vic 3126
Australia

Personal Callers by appointment,
Phone (03) 830-1640

RAILCRAFT 'FLEX-TRAK'
The finest and most realistic flexible track. With a more accurate rail profile, tiny spike heads which are close to scale and slightly irregular sleepers this track gives a hand-laid appearance.
Bundles of six 91 cm lengths:

HO code 100	$20.50
HO code 83	$21.50
HO code 70	18.50
HO code 55	18.50
HOn3 code 70	18.50
HOn3 code 55	18.50
HOn3 code 40	18.50
HO/HOn3 dual, code 70	26.40
HO/HOn3 dual, code 55	26.40
HOn2½, code 55	20.50
N code 70	18.50
N code 55	18.50
N code 40	18.50
Weathered nickel-silver rail, bundles of 33 x 91 cm lengths for hand laid track:	
Code 40	24.00
Code 55	26.00
Code 70	29.50
Code 83	32.00
Code 100	26.50
HOn3 sleepers, per 1000	4.90
HOn3 sleepers, points, (500)	4.90
HO sleepers, per 1000	5.80
HO sleepers, points, (500)	5.80
N sleepers, per 1000	3.90
N sleepers, points (500)	3.90
Rail joiners, code 40 (50)	2.90
Rail joiners, code 55 (50)	2.90
Rail joiners, code 70 (50)	2.90
Rail joiners, code 100 (48)	2.90
Track gauge, HOn3 code 40	2.80
Track gauge, HOn3 code 55/70	2.80
Track gauge, HO code 70	2.80
Track gauge, HO code 100	2.80
Spikes, small (1000)	2.95
Spikes, medium (800)	2.95
Crimping tool for rail joiners	4.95

A leaflet on hand laid track construction is available on request.

RAILCRAFT SAMPLES
Send three 20 cent stamps for a 15 cm sample length of Railcraft Flex-Trak, stating gauge and code desired. Samples of weathered nickel-silver rail and sleepers for hand laid track are available for two 20 cent stamps.

LILIPUT German HO gauge

BR 78 4-6-4T loco	$99.00
BR 38 4-6-0 mixed traffic loco	59.00
BR 05 4-6-4 tender loco, black	206.00
A3/5 Swiss 4-6-0 tender loco	69.00
As above, for Marklin	79.00
BR 05, 4-6-4 tender loco, streamlined, red	135.00

A range of over 70 different passenger and goods vehicles is now available. Send for details of this superbly detailed and well finished rolling stock.

BEMO German HOn2½ (9 mm gauge)

V51 Bo Bo diesel loco	$69.95
O-6-OT loco, metal kit	93.00
Six-wheel open wagon	7.70
Six-wheel van, brown	8.30
Buffer van	11.40
HO gauge transporter wagon (to carry narrow gauge locos etc)	15.30
Passenger coach, four wheel	10.30
Passenger coach, bogie	15.90

Full range of Bemo wheels, couplings etc in stock. Send for details.

AMERICAN KITS HO scale
Send for details of Durango Press, Scale Structures and Rio Grande Models kits.

MERKER & FISCHER German HO Kits
Kits in stock include 2-12-0 tender loco, 0-8-8-0 Mallet tank, 4-6-0 tender loco, steam and diesel railcars, and narrow gauge locos. A range of lost-wax castings is also available. Send for details.

RIVAROSSI ON CODE 70!
Railcraft Code 70 Flex-Trak has such fine spike heads that you can run Rivarossi, Liliput and Fleischmann locos on it despite their deep flanges.

NARROW GAUGE AND SHORTLINE GAZETTE
Excellent American model railway magazine, sample copy $2.25 plus 45c postage, annual subscription (six issues) $16.20.

M & F JOURNAL
Superb German model railway magazine (in German language) with numerous illustrations, many in colour. Sample copy $3.10 plus 45c postage; annual subscription $21.30.

POSTAGE
Under $10, add 80c; $10 to $50 add $1.80; over $50 add $2.50.

ONE OF QUEENSLANDS LARGEST RETAIL STOCKISTS OF BOTH HO GAUGE AND N GAUGE ELECTRIC TRAINS AND ACCESSORIES.

VALLEY TOYLAND and HOBBY CENTRE

OUR RANGE COVERS:–
HO GAUGE, LIMA, RIVAROSSI, JOUEF, BACHMANN, LIFELIKE, TYCO.
N GAUGE, ATLAS-RIVAROSSI, MINITRIX, LIFELIKE, PECO, BACHMANN, LIMA.

SOME OF OUR KITS:–
KIBRI – POLA – VOLLMER – VAU-PE – JOUEF – AIRFIX – LIFELIKE – RATIO – ROUNDHOUSE – TYCO.

CUSTOMER SERVICE IS OUR AIM – IF WE HAVENT GOT IT, WE WILL TRY TO GET IT!

CALL IN AND SEE OUR RANGE REPAIRS GLADLY DONE.

VALLEY CENTRE PLAZA, BRUNSWICK ST. 4006 Ph. 521005

NEW! BERGS NEW!

'HO' SCALE AUSTRALIAN STATION KIT

Moulded in 4 Authentic Colours

A SUPERB CONSTRUCTION KIT FOR ALL AGES
AVAILABLE AT ALL GOOD HOBBY SHOPS

$14.95*

Trade Enquiries Welcome

*Suggested Retail.

B B M

Bergs Brass Models

P.O. Box 527
Parramatta, 2150
Ph. (02) 635 8618

ANOTHER FINE MODEL FROM THE HOME OF NSW BRASS

C30 Tank. price $195.00*

The C30 class tank —
was first introduced in 1903 and put to use on suburban workings in both Sydney and Newcastle. Numbering 145 in all, these versatile engines were finally displaced by electrification of Sydney services. Many were converted to C30T tender engines and ended their days on country branch lines.
A fitting companion to our earlier C30T and abounds with the same excellent details. Ready to run, unpainted.

Be early — very limited quantities.

NEW Friedmont Latest Releases —

'HO' V.R. 'Spirit of Progress' 2 different 4 car packs, makes complete 8 car trains. $30.00 per pack.
'N' scale N.S.W 'RUB' set, two 4 car packs. $19.50

MAIL ORDERS welcome

Berg's Hobbies Pty. Ltd.

223 Church St., Parramatta,
2150.

Bankcard &
American Express
Welcomed.

TRAINWORLD HOBBIES
Mail Order Specialists

OFFERS SPECIAL RATES TO CLUBS AND MEMBERS OF CLUBS

BRANDS INCLUDE LILIPUT VOLLMER ARNOLD RAPIDO PECO RIVAROSSI ROCO KIBRI POLA LOCOMOTION AMC AND AMRI PRODUCTS MARKLIN HAMO

USED MARKLIN AT SPECIAL RATES

MARKLIN SPARE PARTS

DISCONTINUED MARKLIN LINES

TOP PRICES PAID FOR USED MARKLIN

WRITE OR PHONE FOR DETAILS OF OUR LOW LOW PRICES

MARKLIN MAGAZINE ALSO SUPPLIED TO ORDER

RING
(046) 25 5861 OR (046) 25 1745

OR WRITE TO
PO BOX 490,
CAMPBELLTOWN, 2560
INSPECTION BY APPOINTMENT ONLY

H.& E.M. SIMON & SON

MARKLIN
HO & MINI-CLUB
PRIMEX
HAMO
BEMO HOe
WRENN OO
Retail Sales Service Repairs
Kits, Scenic Materials

ELECTROTREN

NEW SHIPMENT NOW IN.
LOCOS, AC & DC, ROLLING STOCK
ACCESSORIES
S.A.E. FOR LIST

23 HARVEY STREET EAST,
WOODVILLE PARK, S.A. 5011.
Ph. (08) 45 1219

BANKCARD welcome here

MAIL ORDERS WELCOME

The FANTASTIC TOY & MODEL SHOP

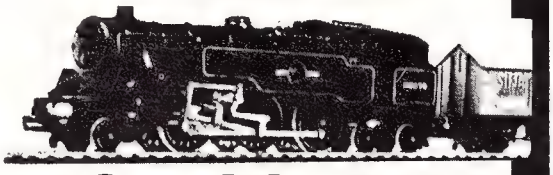
FREE GIFT CERTIFICATES with cash purchases over $5 at Fantastic

SPECIAL OFFER
BRING THIS ADVT
TO OBTAIN A
FREE WAGON
WITH ANY LOCO PURCHASE

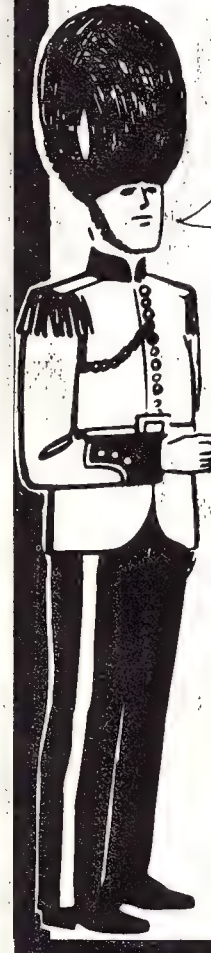
Discover 'Wrenn' 'OO' Wagons Free'er rolling metal wheels, metal chassis Hornby-Triang couplings.

Cheaper prices.

U.S.A. Prototype & European from Mehanotehnika. Unbeatable Value



WHAT HAS A SOLDIER
TO DO WITH MODEL RAILWAYS?



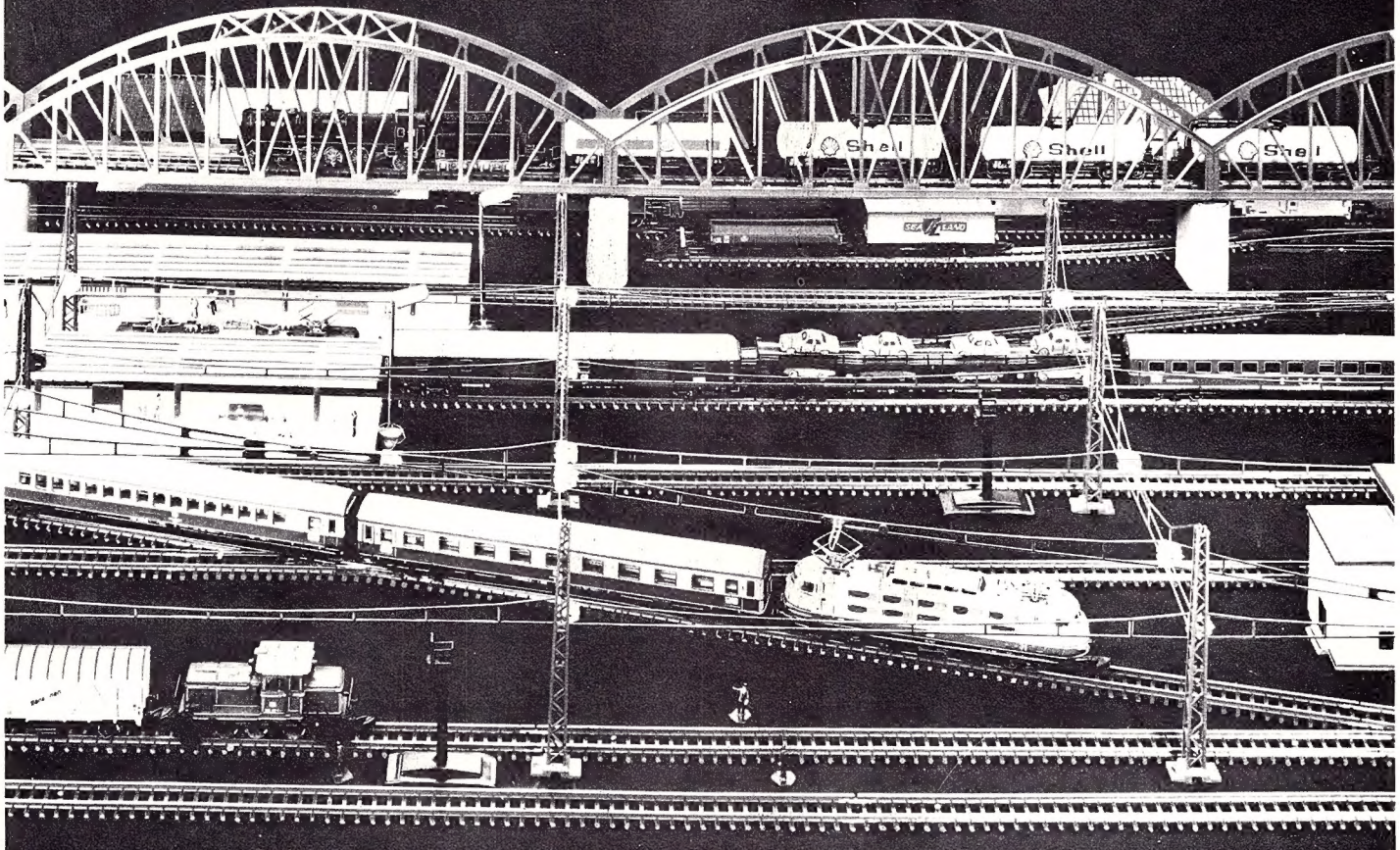
I am Colonel Fantastic and I personally guarantee every purchase you make from Fantastic Modelshops.

* Come and see the new range of K's complete Locomotive Kits with new motors, chassis, wheels, instructions.
* Airfix Great Model Railways Locos, coaches, wagons, track and trackside accessorie kits.
* Wrenn metal body, heavy pulling locomotives including: Sir Nigel Gresley A4, City Class, 0-6-2 Tank, 2-6-4 Tank, Castle.
* Hornby; Lima; Rivarossi; Peco; Pola; Faller; Scenic Accessories.
* We Buy and Sell Second-Hand Trains: 'N', 'OO', 'HO', 'O' Gauge Plastic and Brass, All Prototypes and Brands

The FANTASTIC TOYSHOPS
ANGEL ARCADE, WYNYARD Ph 232 2318
Woolworths Phoenix Plaza. LIVERPOOL
BANKCARD, MAIL ORDERS, LAY-BYS WELCOME

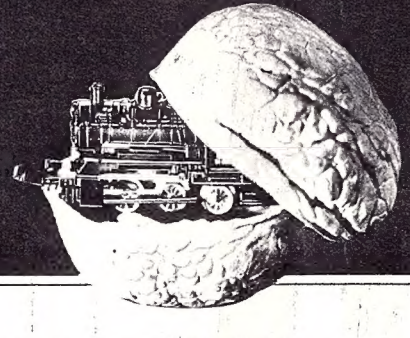
The smallest
(commercially produced)
Electric Railway in the World.

With the Mini Club — the smallest electric railway in the world — the Marklin specialists have overcome the problem of uniquely delicate miniature technology. Marklin Mini Club is a complete model railway system that gives a realistic railway operation to adult enthusiasts. Ask for a copy of the beautifully illustrated colour catalogue showing the full Marklin range, suitable for all ages, at your nearest Marklin retailer.



Marklin Quality and Precision

The Marklin Mini Club system.
Singularly small.
Fascinatingly beautiful.
Astonishingly robust.
Completely extendable.



märklin

a great leisure activity

IN A NUTSHELL!
the smallest electric train in the world.

Hobbyco Pty. Ltd., 561 George Street, SYDNEY, N.S.W. 2000	**(02) 61 9655**
The Model Dockyard Pty. Ltd., 216-218 Swanston Street, MELBOURNE, VIC. 3000	**(03) 663 3505**
Appliance Service Co., 9 Gowrie Street, MOUNT GRAVATT, QLD. 4122	**(07) 349 7865**
H. & E. M. Simon & Son, 23 Harvey Street East, WOODVILLE PARK, S.AUST. 5011	**(08) 45 1219**
J. Guilliamse, 21 Kingston Heights, KINGSTON BEACH, TAS. 7151	**(002) 29 6254**
Stanbridge's Hobby Shop, 19 Guildford Road, MT. LAWLEY, W.AUST. 6050	**(09) 271 8929**

HOBBYSHOP DIRECTORY

GOULBURN — N.S.W.

Wide Range HO/OO & N gauge model railroad rolling stock — track kits & Accessories.
EXPERT REPAIRS — MAIL ORDER/ENQUIRIES WELCOME.

M.G.C. HOBBY CORNER
CNR MUNDY & AUBURN STS, GOULBURN.
P.O. Box 217, Goulburn, 2580.

N.S.W. — NEWCASTLE

Live Steam Locomotives 'O' to 7¼" Gauge. O. Burnaby Bolton, Don Young & M.A.P. Plans; Argus Books, all castings, materials, tools, fittings for locos, marine and stationary steam, IC, boilers, traction engine and more. Send for illustrated catalogue $3.90 posted.

E. & J. WINTER — BOLTON SCALE MODELS,
PO Box 126, Wallsend, NSW 2287. Ph (049) 51 2002.

N.S.W. — MERRYLANDS

We try our most to stock a host of HO OO 009 TT&N scale equipment. Why not pay us a call and have a brouse round or drop us a line for our latest price list. Mail order a pleasure.

ALCE'S HOBBY SHOP
Shop 6, 20 McFarlane St, Merrylands (P.O. Box 257). Ph. (02) 682 3775.

N.S.W. — SYDNEY

For the model railroad specialist where the emphasis is on the modeller and his requirements. Regular shipments of specialist lines will arrive early each month.

KEITH HUDSON'S MODELLERS WORLD
75 Goulburn St, Sydney, 2000.
Ph (02) 212 1667

N.S.W. — PUNCHBOWL

We stock HO-OO and N gauge model trains. Accessories and kits.

PUNCHBOWL HOBBY CENTRE
545 Chapel Road, Bankstown
Phone (02) 709 5082.

QUEENSLAND — MONTVILLE

The growing hobby centre of the Sunshine Coast. Come and see our large (18 sq mtr) MARKLIN Display. 8 Trains on 500ft track.

THE TRAIN DOME.
Montville, Queensland, 4555.
Ph (071) 45 8214

QUEENSLAND — BRISBANE

MARKLIN SPECIALISTS HO, miniclub and 1 gauge. We also stock Hornby, Lima, Jouef, Pola, Faller, Wiking. Mail Orders welcome, repairs carried out in our workshop.

APPLIANCE SERVICE CO
9 Gowrie Street, Mount Gravatt, Qld 4122.
Ph (07) 349 7865

QUEENSLAND — BRISBANE

RAILWAYS EXCLUSIVELY. Scratchbuilders parts by Kemtron, Cal Scale, Selleys. Wood shapes, planks, roof sections, trucks, couplings, wheels. Kits and RTR by most scale brand names. O — HO — N and Narrow Gauge in these scales. Roundhouse spares. Mail Orders Welcome.

AUSTRAL MODELCRAFT
101 Laura St, Ekibin. Mail to PO Box 60, Annerley 4103. Ph (07) 48 3377.

VICTORIA — SYNDAL

For all your hobby supplies, Hornby, Peco, Lima, Campbells, North Eastern, Timber, Athearn, etc.

N-K HOBBIES
264 Blackburn Rd, Syndal, 3149.
Ph. (03) 233 2398

VICTORIA — HAMPTON

JOYCA HOBBIES

Specialists in the sale and service of model railway equipment.

465 Hampton St, Hampton, Vic 3188. Ph (03) 598 9768.

VICTORIA — MENTONE

A wide range of model railway supplies in OO—HO & N including Hornby, Lima, Wrenn, Life Like, Bachmann, Peco, Faller, Herpa, Pola and scenic materials.

THRIFT PARK TOYS
16 Lower Dandenong Rd., Mentone, 3194

S.A. — WHYALLA

Stockists of Lima, Hornby, AHM, Peco, RoCo, Locomotion, Rivarossi, Tempest Autopulse Controllers, Athern, Tyco, Roundhouse, Fybren, Kadee and many others. Mail orders welcome. Write or Call on us.

WESTCOAST MODEL SUPPLIES
45 Patterson St. WHYALLA, 5600. (086) 45 0679 ah.

S.A. — ADELAIDE

The Model Railroad Headquarters for S.A. Specialising in HO & N scales — Hornby — Rivarossi — Roundhouse — Athearn — Peco — Graham Farish — Ratio — Shinohara — Kadee. Railroad books, magazines and records. Large scenic range Faller — Vollmer — Heljan — Kibri. BANKCARD MAIL ORDER and REPAIR SERVICE.

BRIDGLANDS HOBBIES
81 Pirie St. Adelaide, 5000. Ph (08) 223 3782

ENGLAND — LONDON.

TAX FREE, careful packing, fast airmail service, all well known British & Continental brands from stock, phone or write for details.

HADLEY HOBBIES
131 Middlesex Street. London. E.1. England. 283-9870.

MARKET PLACE

PRIVATE: 15 words for $1.50, extra words 8 cents each. Minimum $1.50 per insertion. Advance or continuous insertions not accepted.
COMMERCIAL: $1.75 per line, minimum of $7.00. Advance continuous insertions not accepted.

All monies must accompany copy, which must be clearly written on paper. Definitely no phone insertions accepted. If stamps are used as part payment, each stamp must not exceed the standard postage rate, and must not be attached to any paper.

Send all copy and payment to SCR Publications, PO Box 235, MATRAVILLE, 2036.

WANTED

MARKLIN HO locos, rolling stock, rail, etc. Any condition, P. Ellis, 3 Keiller Street, Moorabbin 3189.

ATLAS N scale GP9 or GP30. Working or damaged, any condition. Send SAE to Lawrence Nagy, 42 Normandy St, Fairfield East 2165.

TRIANG Hornby OO streamlined LMS Coronation Scot Locomotive, blue or maroon; also Triang streamlined Winston Churchill locomotive. Must be in good condition. Laurie Martin, PO Box 431, Liverpool 2170.

GAUGE O model trains. Particularly old Hornby, Lionel, Ferris, Bassett-Lowke, Australian prototypes. Top prices for good material. Interested in all Meccano Products and literature, also Dublo 3 rail. Phone (02) 913 8422 after 8 pm or write W. Baker, 1303 Pittwater Rd, Narrabeen 2101.

NARROW Gauge & Short Line Gazette magazines from Vol. 1 to Vol. 3 complete. Good condition, also books on prototype narrow gauge lines. Ron Sidebotom, 21 Impey St, Murchison, Vic 3610.

WANTED. Model Railway books by Edward Beal. Price and particulars to J. Beal, Gembrook Rd, Launching Place, Vic 3139 (059) 67 3335.

FOR SALE

S GAUGE + AF wagon bodies, white metal castings of small parts. AF wanted to buy. J. Harvey, Box 103, Kooringal 2650. Ph (069) 25 4863.

NSW BRASS '36' and '48' class. Excellent condition both models. '36' not run-in. Painted and lined. Offers only. Contact Alan Holding, 55 Antilla Way, Flagstaff Hill, SA 5159. Ph (08) 270 1201.

WESTSIDE HO GS-4 4-8-4 SP Daylight loco, painted. Never been run seriously $300. HO SP-1 4-10-2 SP unpainted loco never been run seriously $250. Rivarossi HO SP Cab Forward near new $90. NYC Mikado 2-8-2 loco used $30. Crescent Ltd 4 matching coach set never used $30. Athearn HO SP Trainmaster, never used $25. B. Scott, 16/82 Hunter St, Hornsby 2077. Ph (02) 476 3849.

UNITED 'ATSF' 2-8-4 painted, weathered & Kadees, $170. Bob Eastwick, 7 Gosper St, Vincent 4814.

TRIANG/HORNBY R346 Stephensons Rocket with tender and one coach. Sell for best offer or swap for Hornby O gauge or Hornby Dublo items. M. Bodinar. (03) 795 3646.

WORKSHOP 5 kits, VHO, MFE, MFC, TAM (2), S wagons (2), Lima C38 & 44, transformer various other rail kits. Hiley, 235 7344 (business) 608 1354 after 7 pm.

MAGAZINES. Railroad Model Craftsman, 15 complete years 1964 to 1978. Good to excellent. 180 issues for $90.00. Railway Modeller Jan '74 to Sept 1977. 44 issues $15.00. Glen Johnston, 69 Yarrbat Ave, Balwyn 3103. (03) 836 2722.

LOGGING locos mint unused. Booth Kelly 2-6-6-2 $350, Alco Minarets 2-8-2 $130. Must sell, of no further use to me. Michael Down, 16 Woorabinda Drive, Stirling 5152. (08) 339 2605.

ROCO 4133A loco, Roco, Lilliput, Fleischman, Joueff, Eoectroten, Marklin Hamo, rolling stock. SAE for list. P. Ellis, 3 Keiller St, Moorabbin, Vic 3189.

NSW C36 roundtop, loco body has Berg's paint job. Brass logging loco. Write R. Johnson, 15 Jennifer St, Evanston Park 5116.

EXCELLENT club layout for sale. Complete with landscaping, model structures, Shinohara track, automatic signalling allowing three trains on each main line. A branch line to a detailed mine, a branch station. Four control panels with a five colour code system, five different operations can take place simultaneously. Runs nine locos. 24 ft × 8 ft. $1000 ono. Paul Callan, 53 Medcalf St, Warners Bay, Newcastle 2282. Ph (049) 58 3280.

BRASS HO painted Gem Pennsylvania 2-8-0 $130; LMB Santa Fe 2-10-4 $180; Tenshodo GN 4-8-4 $280. Rivarossi HO Santa Fe diesel double unit E8 $49; NKP Berkshire $65; SP Cab Forward $98. R. Fitzsimmons, 7 Woniora Ave, Wahroonga 2076. Ph (02) 48 4605.

TRIANG SYDNEY SUBURBAN — One 4 car set restored Peco fine scale wheels Shinohara pantographs etc. 1 power car, 2 dummies and 1 trailer part restored, 1 power and 1 dummy unrestored. Any offers? SSAE for photograph. 10 Merlin Tce, Kenmore, Qld (07) 378 4462.

BRASS HOn3 plantation loco with tender and Spartan series 2-6-0, three meters of Shinohara track and four points. 2 pair of brass bogies, all new. $110 the lot. M. Seccombe, PO Box 261 Bourke, NSW 2840.

COMMERCIAL

TRAIN TRONICS lines now available in Australia. Add new excitement with a chase light or progressive light kit on your existing buildings. Our range also includes crossing signals, horns, constant light kits for N/HO/S/O, Action-Lit cars, fibre optics, light emitting diodes in red-green-yellow, automatic point control and automatic reversing circuit.
In addition we have Herka scenic materials from Canada and Modelstone gypsum cements.
Send $1.20 for full details to:
Train Tronics Australia, PO Box 402, EDGECLIFF 2027. (02) 326 1509.

ASSEMBLY service for white metal kits of Australian Prototype (eg FSM and Protype). Price upon application. ABL MODEL PRODUCTS. Phone (02) 607 4460 6 to 9 pm (weeknights).

Build yourself a wheat silo! Aluminium 0.004" × 150 × 75 mm HO Corrugated a sheet $0.15, HO Tray a sheet $0.15, N Tray a sheet $0.15.
Corrugated Styrene (HO) 010" × 150 × 75 mm a sheet $0.20. We can also offer subscriptions to most UK and US railway magazines, write for details. Postage: If under $20.00 add $1.00, over $20.00 post free.
Mail Order Models, 14/29 'Marsden', Grt Western Hwy, Parramatta, NSW 2150.

NSWGR HO Z26 class loco body kit in etched brass, with castings and instructions . . . $76 posted. (Use FSM's Z25 class chassis.) Approx. 3 weeks delivery from receipt of order. R. Pilgrim, 29 Otford Rd, Helensburgh, NSW 2508.

"HANDBOOK FOR RAILWAY STEAM LOCOMOTIVE ENGINEMEN". 200 pages, coloured diagrams, $16.50 post free. Also "THE FASTEST TRAINS IN THE WORLD" steam, diesel and electric, $19.50 — Send SAE for list — THE RAILWAY BOOK Co. PO Box 247, Maryborough 4650.

BY THE time you read this we should have stocks of the following: Airfix wagon kits 'OO'; Colin Waite point rodding and crank kits. Write for details of prices. MAIL ORDER MODELS, 14/29 'Marsden' Great Western Highway, Parramatta, NSW 2150.

N.S.W. — SYDNEY

Fantastic models shown by enthusiasts. Tremendous range OO, HO & N sets, loco's, track and accessories. Mail Orders. Layby's and Bankcard welcome.

THE FANTASTIC MODEL SHOPS

34 Angel Arcade, Ash St, Sydney, 2000 and

N.S.W. — LIVERPOOL

Come and see the Fantastic range of Kits and Model Railway goodies at our new address. Laybys. Bankcard and even cash welcome.

THE FANTASTIC TOY & MODELSHOP

No 1, Woolworths Phoenix Plaza, Liverpool, 2170. Ph. (02) 602 1256.

MIRANDA — NSW

HO and N Gauge rolling stock, track, building kits and accessories.

LAY-BY BANKCARD

THE MODEL RAILWAY CENTRE

555 Kingsway, Miranda, NSW 2228. Ph (02) 524 8855.

NSW — WOLLONGONG

Bill Webb

AUSTRALIA WIDE

Mail Order Specialist for over 4 years.

See Advertisement on other page.

PO Box 68, Figtree, NSW 2525 or 21 Mears Ave., Mangerton. NSW 2500. Phone (042) 29 5824.

N.S.W. — NEWCASTLE

BIG RANGE HO, OO & N gauge model railway equipment. Also stocks of Rivarossi, Hornby, Lima, Peco, Kadee, Roundhouse, Minitrix, Arnold Rapido, Athearn, Superquick and many others. Full range of building kits. Sales & Prompt Repairs. Authorised Hornby Servicing Agents.

VIC BARNES' HOBBY CENTRE

213 Lambton Rd, New Lambton, 2305. Ph (049) 521886.

N.S.W. — DUBBO

Serving the Model Railroad Enthusiast in the West:- Large range of Rivarrossi, Arnold, Peco, Kadee, Protype, Roundhouse, Friedmont, MRC, Lima, Wrenn, Hornby, Airfix, Books, Accessories, Tools, Paints, AMC Products.

MORGANS HOBBIES.

59 Boundary Road, Dubbo.

QUEENSLAND — GOLD COAST

The Model Place

Southpoint Arcade, 7 Nerang St, Southport 4215 Tel (075) 32 4725

QUEENSLAND — UNDERWOOD

THE HOBBY WAREHOUSE

30 Kingston Road, Underwood, Qld 4119. Ph 341 2662.

W.A. — MT LAWLEY (Perth)

For all model railways
Model planes
Meccano sets etc
Scalectric
Plastic kits etc

STANBRIDGE'S HOBBY SHOP

19 Guildford Rd, Mt Lawley (at the subway). Ph. (092) 71 8929

VICTORIA — EAST HAWTHORN

Custom built tramcars in 4 mm, ¼ inch and ½ inch scales. Tramway layouts, tram kits. General Hobby kits. Second hand Hornby Dublo and 'O' gauge tinplate bought and sold.

W.E.L.T. Tramway Workshops (Model Makers)

475 Burke Road, East Hawthorn 3132.

VICTORIA — BOX HILL

THE ENGINE SHED

5 Carrington Road, Box Hill 3128. Phone (03) 89 7027.

VICTORIA — EAST KEW

SPECIALISED MODEL RAILWAYS
BRITISH 'O', 'OO' & 'N'
CONTINENTAL 'HO' & 'N'
AMERICAN 'HO' & 'N'
AUSTRALIAN AS AVAILABLE
Accessories a Speciality. Modellers Tools and Equipment

HOBBYCRAFT

1351 Burke Road, East Kew, 3102. Mail Order P.O. Box 88, Ivanhoe, 3079. Ph (03) 80 3241.

ST. GEORGE HOBBIES

SPECIALISING IN HO/OO SCALES

Locos & Rolling Stock: Rivarossi ● Roundhouse ● Mehano ● Lima ● Protype ● Friedmont ● Mainline ● Ratio ● Bachmann ● Atlas ● Airfix ● Model Power.

Track & Points: PECO Insulfrog, Electrofrog, Fine Scale, SHINOHARA double slips, crossovers, 3 way and curved.

Scratchbuilding & General Items: Sentinel, Protype & Cavendish fittings. Romford wheels, axles, crankpins and gearsets. BA screws, nuts, taps and drills. Styrene sheet. ECM & MW motors. AMRI accessories. Mn'J decals. Floquil & Humbrol paints. K&S brass. PMH bogies. Cavalcade wheels. Badger air brushes. Kalmbach books. Merten figures. Flock, lichen, cork. Kadee . . .

Electrical: Locomotion Mk3 throttle, Twinette control, CD point power, etc. Tempest Autopulse throttle. H&M transformers & point motors.

Building Kits: Heljan ● Kibri ● Pola ● Lifelike ● Superquick ● Revell ● Builder Plus ● Merit ● Peco Lineside.

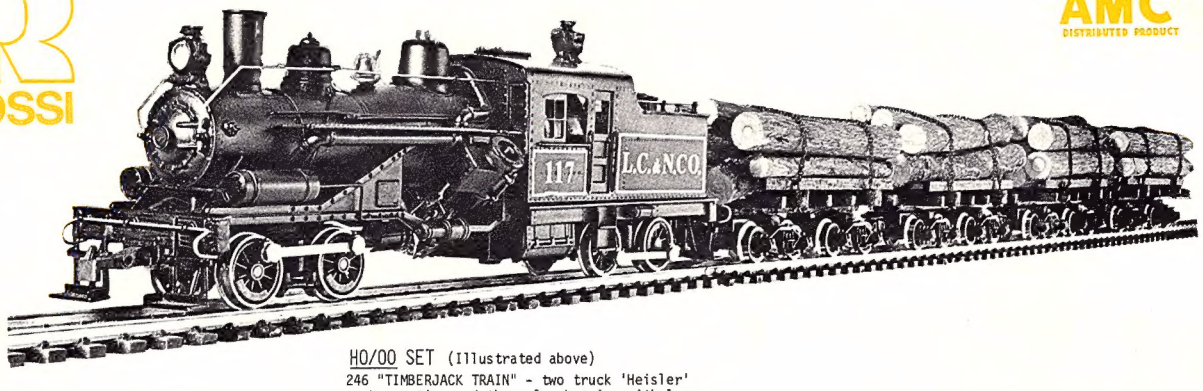
Open until 5.00pm Saturdays

Trading hours: Tuesday to Friday 9.00 am - 5.30 pm (until 8 Thurs)
Saturday 9.00 am - 5.00 pm
Closed Sunday & Monday

504 ROCKY POINT ROAD, SANS SOUCI, NSW 2219
Phone (02) 529 9809

RIVAROSSI

AN AMC DISTRIBUTED PRODUCT



HO/00 SET (Illustrated above)

246 "TIMBERJACK TRAIN" - two truck 'Heisler' Locomotive and three log buggies with logs. As in the prototype the loco has shaft drive to each truck and simulated 'V' formation steam engine. $130.00

HO/00

SOME LOCOMOTIVES

General Motors EMD E8 Double Unit Diesel Electric Locomotive - one unit powered the other dummy - with illuminated number boards and automatic reversal of lights the model is 500mm long
1926 Santa Fe - Red & silver
1927 Northern Pacific
.. .. $79.95

1829 Single Unit EMD E8 - powered unit with lit number boards etc. in B. & O. paint. 250mm in length approximately.. .. .. $45.00

1279 Hudson 4-6-4 Locomotive with tender - "Chesapeake & Ohio" - Black with red cab-roof and silver smoke box door - Baker valve gear - working headlight - 345mm $99.95

1996 German Diesel Hydraulic Locomotive, type V320 - 12-wheel, operating lights which change with direction - 270mm long $67.50

1340 German, BD Mayer type 98 009 Articulated Steam Locomotive - 0-4-4-0 wheel arrangement - driven on both axle groups - operating lights - 140mm $99.95

AMERICAN STANDARD COACHES OF THE TWENTIES

2648 Day Car of the C.R. of N.J. - Blue/cream $11.75
2768 Pullman, B. & O. in blue and grey $11.75
2843 Pullman, Milwaukee - chocolate and orange . .. $11.75

AMERICAN SMOOTH SIDED COACH

2870 Roomette - Illinois Central - "City of Jackson" $11.75

A BRITISH COACH

3932 L.M.S. First Class Coach, service No. 15604 - fully fitted with compartments and saloon. Beautifully detailed with handrails, corridor connections etc. etc. $31.25

AMERICAN FREIGHT VEHICLES

2257 Boom and Work Car - Minneapolis & St Louis .. $17.50
2311 Old Time Box Car - California Fast Freight .. $7.50
12211 KIT - Box Car - Minneapolis & St Louis $7.25
12300 KIT - Reefer - Thermice $7.25
12298 KIT - Chemical Tank Car - UTLX $10.75

CONTINENTAL FREIGHT CARS

2048 Articulated Car Transporter with 6 cars $25.00
2081 4-wheeled Flat Car with "Rivarossi" container - container is fixed to wagon and cannot be removed. 115mm long $6.75
2088 Bogie Flat Car with piggyback Shell tanker .. $14.95

TURNTABLE

5104 Turntable - Automatic - 3 roads on, 11 roads off - table 14" in diameter $125.00

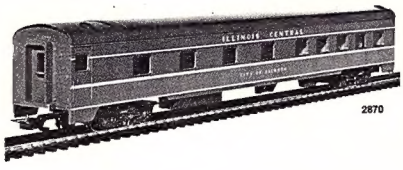
BUILDING KIT

15103 Kit for Roundhouse Stall - single stall - several units can be used to make a full roundhouse $19.95

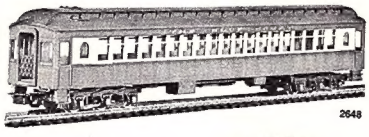
COACH LIGHTING KIT

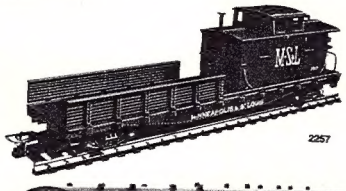
14913 D.I.C. Constant Lighting Kit designed for "Royal Scot" coaches but can be modified to suit others as set out in instructions supplied $14.95

TO ALL RETAILERS: The prices set out or referred to herein are recommended prices only and there is no obligation to comply with the recommendation.

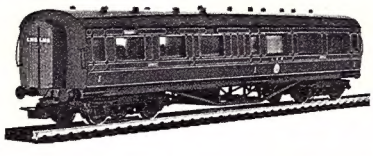


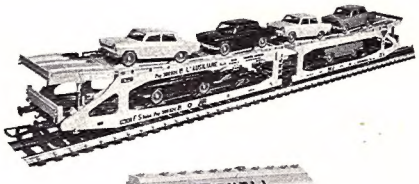
2870

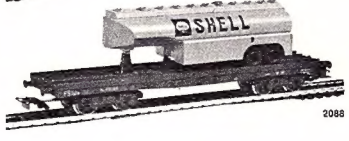

2648



2257







2088

N

SETS

9012 "GOLDEN SPIKE CENTENNIAL" Set - comprised of 2-8-4 'Berkshire' Locomotive with three streamlined passenger cars - two day cars & tail car - in the special blue and gold livery $99.95

9007 "CHIPPEWA HIAWATHA" Set - comprised of a 4-6-2 Pacific Locomotive, a combine, a pullman and an observation car with end platform. The set is painted in the orange and chocolate livery. Cars have interior fittings and ride on 6-wheel trucks. $67.50

9008 "CAPITOL LIMITED" Set - contains a Pacific 4-6-2 Locomotive plus three cars - combine, pullman and observation car all painted in blue and grey. $80.00

AMERICAN FLUSH SIDED PASSENGER CARS

9500 Combine - Union Pacific $8.25
9501 Combine - C. & N.W. $8.25
9502 Combine - Pennsylvania $8.25

9503 Sleeper - Union Pacific $8.25
9504 Sleeper - C. & N.W. $8.25
9505 Sleeper - Pennsylvania $8.25

9506 Tail Car - Union Pacific $9.25
9507 Tail Car - C. & N.W. $9.25
9508 Tail Car - Pennsylvania $9.25

ITALIAN COACHES

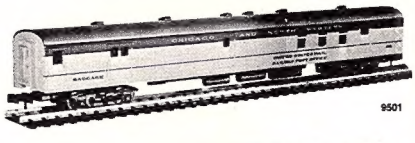
9522 Type AZX FS High Speed 1st Class $6.75
9633 Type BZX FS High Speed 2nd Class $6.75

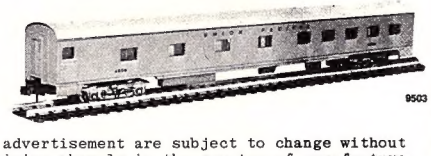
AMERICAN FREIGHT CAR

9356 Reefer - El Capitan (Santa Fe) $4.25

CONTINENTAL FREIGHT VEHICLES

9314 Reefer - FINDUS $4.25
9315 Belgian Open Wagon $3.50
9316 Italian Open Wagon $3.50


9501


9503

1996

PRICES quoted in this advertisement are subject to change without notice. Prices are rising sharply in the country of manufacture and the length of time that prices can be held depends to a large extent on the length of time that it takes to exhaust old stocks. There was a rise of 6½% in September which has not been incorporated into Australian price levels. All goods shipped after 1st January have risen in price again by amounts up to 15%. Costs of handling goods in Australia have increased, as have freight rates within the Commonwealth. These factors are beyond our control and the only restraint on prices that we can have is to hold them for as long as is possible and hope that a miracle occurs. They say it takes awhile to do anything - miracles only take longer.

We continue to test run all items of rollimg stock & locomotives, and to ensure that we release goods for sale that are to 'fair average quality' standards. With the perfectionists we have around here that means they are as good as we can get them.

RIVAROSSI

from good hobby shops everywhere

AUSTRALIAN MODEL CRAFT CO.,
P.O. Box 118, Albury. 2640